

DEPARTMENT OF THE NAVY
FY 1997 BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
MARCH 1996

WEAPONS PROCUREMENT, NAVY
BUDGET ACTIVITY 2

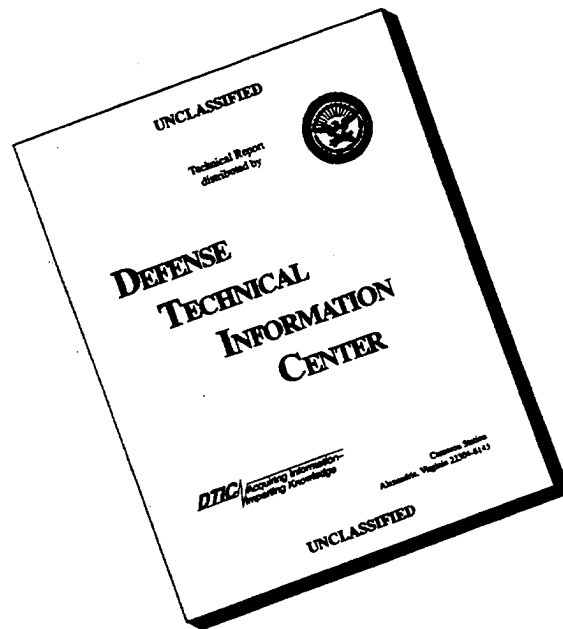
DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

19960503 061

DTIC QUALITY INSPECTED 1

DISCLAIMER NOTICE



**THIS DOCUMENT IS BEST
QUALITY AVAILABLE. THE
COPY FURNISHED TO DTIC
CONTAINED A SIGNIFICANT
NUMBER OF PAGES WHICH DO
NOT REPRODUCE LEGIBLY.**

UNCLASSIFIED

Department of the Navy

FY 1997 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 03/06/96

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1997 UNIT COST	MILLIONS OF DOLLARS				S
				QUANTITY	COST	QUANTITY	COST	
BUDGET ACTIVITY 02: Other Missiles								
Strategic Missiles								
5	2101 Tomahawk	A	737,608	274	264.5	107	111.5	120 88.5 U
Tactical Missiles								
6	2206 ANRAAM	A	975,432	106	74.1	115	73.6	37 36.1 U
7	2224 Harpoon	A		58	66.8	75	83.1	U
8	2230 JSOW	B	644,260				25.5	100 64.4 U
9	2234 Standard Missile	A	1,554,827	202	240.4	64	125.4	127 197.5 U
10	2242 RAM	A	347,593	240	66.4	230	67.2	140 48.7 U
11	2280 Aerial Targets	A			119.1		66.6	73.1 U
12	2285 Drones and Decoys	A			7.4			U
13	2290 Other Missile Support	A			8.8		23.3	18.0 U
Modification Of Missiles								
14	2301 Tomahawk Mods	A			17.3		47.9	U
15	2304 Sparrow Mods	A			12.6		2.9	2.5 U
16	2315 Sidewinder Mods	A			3.5		16.5	1.3 U
17	2326 Harpoon Mods	A			5.4		2.6	22.9 U
18	2356 Standard Missiles Mods	A			32.4		29.9	18.5 U
Support Equipment And Facilities								
19	2420 Weapons Industrial Facilities	A			51.2		41.8	34.3 U
20	2430 Fleet Satellite Comm (MYP) (Space)	A			131.3		87.4	113.2 U
Ordnance Support Equipment								

* ITEMS UNDER \$50,000

UNCLASSIFIED

PAGE N- 3

000

UNCLASSIFIED

002

Department of the Navy

FY 1997 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 03/06/96

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1997 UNIT COST	MILLIONS OF DOLLARS				S		
				FY 1995		FY 1996			FY 1997	
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
21 2500	Ordnance Support Equipment	A			11.6		9.7		19.1	U
TOTAL	Other Missiles				1,112.7		814.9		738.2	

* ITEMS UNDER \$50,000

UNCLASSIFIED

PAGE N- 4

00 MAR 96

Weapons Procurement, Navy
Program and Financing (in Thousands of dollars)

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)				Obligations		
		1995 actual	1996 est.	1997 est.	1995 actual	1996 est.	1997 est.	
Program by activities								
Direct program								
00 0101	Ballistic missiles	674,011	505,431	323,149	778,261	546,563	392,923	
00 0201	Other missiles	1,112,718	814,857	738,239	982,919	861,739	738,065	
00 0301	Torpedoes and related equipment	181,003	124,934	110,682	233,456	187,836	116,505	
00 0401	Other weapons	86,880	42,155	31,467	103,503	35,217	33,071	
00 0501	Other Ordnance			149,355	49,320	29,981	120,036	
00 0601	Spare and repair parts	47,855	61,323	47,471	60,353	80,575	49,640	
00 9101	Total direct program	2,102,467	1,548,700	1,400,363	2,207,812	1,741,911	1,450,240	
01 0101	Reimbursable program	55,056	74,800	74,800	33,786	96,070	74,800	
10 0001	Total	2,157,523	1,623,500	1,475,163	2,241,598	1,837,981	1,525,040	
Financing:								
Offsetting collections from:								
11 0001	Federal funds(-)	-40,056	-74,800	-74,800	-33	-74,800	-74,800	
13 0001	Trust funds(-)	-15,000			-7,577	-15,000		
14 0001	Non-federal sources(-)				-15,000			
17 0001	Recovery of prior year obligations				-10,842			
21 4002	Unobligated balance available, start of year:							
21 4003	For completion of prior year budget plans	-74,400	-64,963		-904,672	-702,539	-488,058	
21 4009	Available to finance new budget plans	-96,453			-74,400	-64,963		
22 0001	Reprogramming from/to prior year budget plan	9,253	2,500		9,253	2,500		
22 4001	Unobligated balance transferred to other acco							
22 4009	Unobligated balance available, end of year:							
24 4002	For completion of prior year budget plans	64,963			702,539	488,058	438,181	
24 4003	Available to finance subsequent year budget	48,837			64,963			
25 0001	Unobligated balance expiring				48,837			
39 0001	Budget authority	2,054,667	1,486,237	1,400,363	2,054,667	1,486,237	1,400,363	
Budget authority:								
40 0001	Appropriation	2,123,667	1,656,193	1,400,363	2,123,667	1,656,193	1,400,363	
40 3601	Appropriation rescinded (unob bal)		-14,600			-14,600		
41 0001	Transferred to other accounts (-)	-69,000	-185,174		-69,000	-185,174		
42 0001	Transferred from other accounts		29,818			29,818		
43 0001	Appropriation (adjusted)	2,054,667	1,486,237	1,400,363	2,054,667	1,486,237	1,400,363	

Program and Financing (in Thousands of dollars)

Weapons Procurement, Navy

Budget Plan (amounts for PROCUREMENT actions programmed)

Obligations

Identification code	17-1507-0-1-051	1995 actual	1996 est.	1997 est.	1995 actual	1996 est.	1997 est.
Relation of obligations to outlays							
71.0001	Obligations incurred				2,218,988	1,763,181	1,450,240
72.1001	Orders on hand, SOY				-124,317	-80,181	
72.4001	Obligated balance, start of year				5,376,532	4,183,692	3,220,602
74.1001	Orders on hand, EOY				80,181		
74.4001	Obligated balance, end of year				-4,183,692	-3,220,602	-2,653,998
77.0001	Adjustments in expired accounts (net)				10,756		
78.0001	Adjustments in unexpired accounts				-10,842		
90.0001	Outlays (net)				3,367,606	2,646,090	2,016,844

Weapons Procurement, Navy
Object Classification (in Thousands of dollars)

00 MAR 96

Identification code	17-1507-0-1-051	1995 actual	1996 est.	1997 est.
Direct obligations:				
125 101 Advisory and assistance services		39,826	32,116	31,477
125 301 Purchase goods/services (inter/intra) Fed accounts		124,311	102,191	93,585
126 001 Purchase from revolving funds		70,316	98,121	77,742
131 001 Supplies and materials		1,973,359	1,509,483	1,247,436
131 001 Equipment		-----	-----	-----
199 001 Total Direct obligations		2,207,812	1,741,911	1,450,240
Reimbursable obligations:				
226 001 Supplies and materials		33,786	42,532	21,900
231 001 Equipment		-----	53,538	52,900
299 001 Total Reimbursable obligations		33,786	96,070	74,800
999 901 Total obligations		2,241,598	1,837,981	1,525,040

THIS PAGE LEFT INTENTIONALLY BLANK

Procurement of Ammunition, Navy & Marine Corps
Program and Financing (in Thousands of dollars)

00 MAR 96

Identification code	17-1508-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)				Obligations	
		1995 actual	1996 est.	1997 est.	1995 actual	1996 est.	1997 est.
Program by activities							
Direct program							
00 0101	Proc Ammo. Navy	274,782	217,183		187,412	227,373	66,557
00 0201	Proc Ammo. MC	131,164	198,890		122,159	153,374	34,537
00 9101	Total direct program	407,946	416,073		309,571	380,747	101,094
01 0101	Reimbursable program		10,000				
10 0001	Total	407,946	426,073		309,571	380,747	101,094
Financing:							
Offsetting collections from:							
11 0001	Federal funds(-)		-10,000			-10,000	
21 4002	Unobligated balance available, start of year:						
21 4002	For completion of prior year budget plans					-98,375	-143,701
21 4003	Available to finance new budget plans		-6,900			-6,900	
24 4002	Unobligated balance available, end of year:						
24 4002	For completion of prior year budget plans	6,900			98,375	143,701	42,607
24 4003	Available to finance subsequent year budget				6,900		
39 0001	Budget authority	414,846	409,173		414,846	409,173	
Budget authority:							
40 0001	Appropriation	414,846	430,053		414,846	430,053	
41 0001	Transferred to other accounts (-)		-20,880			-20,880	
43 0001	Appropriation (adjusted)	414,846	409,173		414,846	409,173	
Relation of obligations to outlays:							
71 0001	Obligations incurred				309,571	370,747	101,094
72 4001	Obligated balance, start of year					111,518	187,526
74 4001	Obligated balance, end of year				-111,518	-187,526	-136,488
90 0001	Outlays (net)				198,053	294,739	152,132

00 MAR 96

Procurement of Ammunition, Navy & Marine Corps
 Object Classification (in Thousands of dollars)

Identification code	17-1508-0-1-051	1995 actual	1996 est.	1997 est.
Direct obligations:				
125 303	Purchases goods/services (inter/intra) fed accounts	270,175	331,014	87,024
131 001	Purchases from revolving funds	39,396	49,733	14,070
131 001	Equipment	---	---	---
199 001	Total Direct obligations	309,571	380,747	101,094
999 901	Total obligations	309,571	380,747	101,094

Procurement of Ammunition, Navy & Marine Corps
(Rescission Proposal)

00 MAR >>

Program and Financing (in Thousands of dollars) SUPPLEMENTAL

Obligations

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	17-1508-5-1-051	1995 actual	1996 est.	1997 est.	1995 actual	1996 est.	1997 est.
Program by activities:							
10.0001 Total		-10,000			-7,500		-1,500
Financing:							
21.4002 Unobligated balance available, start of year:							2,500
24.4002 For completion of prior year budget plans					-2,500		-1,000
40.3501 Budget authority (Appropriation rescinded) (-10,000			-10,000		
Relation of obligations to outlays:							
71.0001 Obligations incurred					-7,500		-1,500
72.4001 Obligated balance, start of year					2,730		-2,730
74.4001 Obligated balance, end of year						1,830	1,830
90.0001 Outlays (net)					-4,770		-2,400

Procurement of Ammunition, Navy & Marine Corps
(Recission Proposal)
Object Classification (in Thousands of dollars)

00 MAR 96

SUPPLEMENTAL

Identification code	17-1500-5-1-051	1995 actual	1996 est.	1997 est.
Direct obligations:				
131.001 Equipment			-7,500	-1,500
199.001 Total Direct obligations			-7,500	-1,500
999.901 Total obligations			-7,500	-1,500

Comparison of FY 1996 Program Requirements as Reflected
in the FY 1996 Budget with FY 1996 Program Requirements as
Shown in FY 1997 Budget (In Thousands of Dollars)

	FY 1996 Total Program Requirements <u>Per FY 1996 Budget</u>	FY 1996 Program Requirements <u>Per FY 1997 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	520,551	505,431	-15,120
Other Missiles	839,753	814,857	-24,896
Torpedoes and Related Equipment	118,684	124,934	+6,250
Other Weapons	43,401	42,155	-1,246
Ammunition	200,710	217,183*	+16,473
Spares and Repair Parts	64,022	61,323	-2,699
Subtotal Direct Program	1,787,121	1,548,700	-238,421
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,861,921	1,623,500	-238,421

1. Ballistic Missiles (-\$15.1 million)
Decrease reflects Congressional undistributed and inflation reductions (-\$4.2 million) and revised inflation rates and other minor pricing adjustments (-\$10.8 million).
2. Other Missiles (-\$24.9 million)
Changes include Congressional adjustments to AMRAAM (-\$4.2 million), Tomahawk (-\$41.7 million), Harpoon (+\$40.0 million), Tomahawk Mods (+\$49.3 million) and Weapons Industrial Facilities (\$+30.0 million). A DoD adjustment to the Standard Missile program (-\$104.0 million) also accounts for part of the change. A reprogramming for the Global Broadcast System (+\$59.0 million) was partially offset with funding from Tomahawk (-\$5.2 million), Fleet Satellite Communications (-\$21.0 million), AMRAAM (-\$1.6 million) and Sparrow Mods (-\$1.3 million). Adjustments also include Congressional undistributed general and inflation reductions (-\$7.5 million), revised inflation rates and other minor pricing adjustments (-\$17.5 million) and other minor below threshold reprogrammings.
3. Torpedoes and Related Equipment (+\$6.3 million)
Changes include a Congressional increase to procure additional Vertical Launch ASROC (+\$10.0 million), adjustments for Congressional undistributed general and inflation reductions (-\$1.0 million) and revised inflation rates and other minor pricing adjustments (-\$2.7 million).
4. Other Weapons (-\$1.2 million)
Changes include adjustments for Congressional undistributed inflation reductions (-\$.3 million), revised inflation rates and other minor pricing adjustments (-\$.9 million).
5. Ammunition (+\$16.5 million)
Changes include Congressional increases for additional procurement of Laser Guided Training Rounds (+\$7.8 million), Airborne Expendable Countermeasures (+\$2.0 million), and 5"/54 Gun Ammunition (+\$14.5 million). Adjustments also include a Congressional decrease to General Purpose Bombs (-\$3.1 million) and revised inflation rates and other minor pricing adjustments (-\$4.7 million). *Funding transferred to Procurement of Ammunition, Navy and Marine Corps appropriation in FY 1997 budget submission.
6. Spares & Repair Parts (\$-2.7 million)
Changes include adjustments for Congressional undistributed inflation reductions (-\$.5 million), revised inflation rates and other minor pricing adjustments (-\$1.3 million) and minor below threshold reprogrammings (-\$.9 million).

Comparison of FY 1996 Financing as Reflected in the FY 1996 Budget
with FY 1996 Financing as Shown in FY 1997 Budget
(In Thousands of Dollars)

	FY 1996 Financing Per FY 1996 Budget	FY 1996 Financing Per FY 1997 Budget	Increase (+) Decrease (-)
Program Requirements (Total)	1,861,921	1,623,500	-238,421
Program Requirements (Direct)	(1,787,121)	(1,548,700)	(-238,421)
Program Requirements (Reimb)	(74,800)	(74,800)	(0)
Less:			
Anticipated Reimbursements	74,800	74,800	-
Add:			
Unob bal avail, start of year to finance new budget plans:	-	-64,963	-64,963
Unob bal transf to other accts		2,500	+2,500
Appropriation Adjusted	1,787,121	1,486,237	-300,884
Budget Authority:			
FY 1996 DoD Appropriations Act	1,787,121	1,656,193	-130,928
Appropriation rescinded	-	-14,600	-14,600
Transferred from other accts	-	29,818	+29,818
Transferred to other accounts	-	-185,174	-185,174
Appropriation (Adjusted)	1,787,121	1,486,237	-300,884

Explanation of Changes in Financing

The \$300.9 million change in program financing is the result of the transfer of ammunition funding to the Procurement of Ammunition, Navy and Marine Corps appropriation (-\$200.7 million), reductions for Congressional undistributed general and inflation reductions (-\$16.6 million), revised inflation rates (-\$33.3 million), transfers to other accounts (-\$185.2 million), transfers from other accounts (+\$29.8 million) and various Congressional adjustments to the appropriation during their review of the budget.

THIS PAGE LEFT INTENTIONALLY BLANK

Comparison of FY 1995 Program Requirements as Reflected
in the FY 1996 Budget with FY 1995 Program
Requirements as Shown in FY 1997 Budget (In Thousands of Dollars)

	FY 1995 Total Program Requirements Per FY 1996 Budget	FY 1995 Total Program Requirements Per FY 1997 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	674,011	674,011	-
Other Missiles	1,102,436	1,112,718	+10,282
Torpedoes and Related Equipment	183,743	181,003	-2,740
Other Weapons	71,176	86,880	+15,704
Ammunition	279,582*	274,782*	-4,800
Spares and Repair Parts	52,039	47,855	-4,184
Subtotal Direct Program	2,083,405	2,102,467	+14,262
Reimbursable	74,800	55,056	-19,744
Total Fiscal Year	2,158,205	2,157,523	-682

016K

1. Ballistic Missiles

No change.

2. Other Missiles (+\$10.3 million)

Change reflects reductions to Tomahawk (-\$4.1 million), AMRAAM (-\$1.1 million), Aerial Targets (-\$2.3 million) and Ordnance Support Equipment (-\$2.0 million) to fund the FY 1995 Ship Cost Adjustment. Adjustments were also made for Congressional rescissions from the Tomahawk (-\$10.0 million), Harpoon (-\$2.4 million) and Ordnance Support Equipment (-\$2.2 million) programs. Of the \$50.7 million offered from the Tomahawk program on the Omnibus Reprogramming to fund emergent requirements, only a reduction of \$12.8 million was approved (Net change +\$37.9 million). Funds were reprogrammed from Drones and Decoys (-\$2.5 million) to the Research, Development, Test and Evaluation appropriation to complete testing of ITALD. Adjustments were also made for minor below threshold reprogramming actions.

3. Torpedoes and Related Equipment (-\$2.7 million)

Change reflects minor below threshold reprogrammings.

4. Other Weapons (+\$15.7 million)

Change reflects reprogramming actions for cancelled account adjustments and for prior year deficiencies.

5. Ammunition (-\$4.8 million)

Change reflects a reprogramming from the Shipboard Expendable Countermeasures program in support of the FY 1995 Ship Cost Adjustment (SCA) (-\$4.8 million). *Funding in Procurement of Ammunition, Navy and Marine Corps appropriation.

6. Spares & Repair Parts (-\$4.2 million)

Change reflects minor below threshold reprogrammings.

Comparison of FY 1995 Financing as Reflected in the FY 1996 Budget
with FY 1995 Financing as Shown in FY 1997 Budget
(In Thousands of Dollars)

	FY 1995 Financing Per FY 1996 Budget	FY 1995 Financing Per FY 1997 Budget	Increase (+) Decrease (-)
Program Requirements (Total)	2,158,205	2,157,523	-682
Program Requirements (Direct)	(2,083,405)	(2,102,467)	(+19,062)
Program Requirements (Reimb)	(74,800)	(55,056)	(-19,744)
Less:			
Anticipated Reimbursements	74,800	55,056	-19,744
Add:			
Unob bal avail, start of year to finance new budget plans	-69,000	-74,400	-5,400
Unob bal avail, end of year to finance subseq yr budget plans		64,963	+64,963
Reprog, prior year budget		-38,363	-38,363
Appropriation Adjusted	2,014,405	2,054,667	+40,262
Budget Authority:			
FY 1995 DoD Appropriations Act	2,159,080	2,123,667	-35,413
Appropriation rescinded			
Reduct Pursuant to P. L. 103-335	-15,160		+15,160
Transferred to other accounts	-129,515	-69,000	+60,515
Appropriation (Adjusted)	2,014,405	2,054,667	+40,262

Explanation of Changes in Financing

The \$40.3 million change in program financing is the result of sources transferred out to finance the FY 1995 Ship Cost Adjustment (-\$9.5 million), Congressional rescissions (-\$14.6 million), the Omnibus Reprogramming action funding emergent DOD requirements and adjustments to reflect actual reimbursements earned.

BUDGET ITEM JUSTIFICATION SHEET													Mar-96
APPROPRIATION/BUDGET ACTIVITY:			P-1 ITEM NOMENCLATURE:										
WEAPONS PROCUREMENT, NAVY			TOMAHAWK (J2EL) (PEO(CU)) (BLI: 210100)										
2/OTHER MISSILES			Prior Years	FY95	FY96	FY97	FY98	FY99	FY00	FY01	To Complete	Total Program	
QUANTITY			3,700	274	107	120	100	0	0	0	-	4,301	
COST (In Millions)			\$6,998.0	\$264.5	\$111.5	\$88.5	\$153.9	\$90.8	\$84.0	\$94.1	-	\$7,885.3	
Initial Spares (In M)			\$283.9	\$3.3	\$5.7	\$7.4	\$8.0	\$7.9	\$0.0	\$0.0	-	316.2	
Total (In Millions)			\$7,281.9	\$267.8	\$117.2	\$95.9	\$161.9	\$98.7	\$84.0	\$94.1	-	\$8,201.5	
Unit Cost (In Millions)			\$2.0	\$1.0	\$1.1	\$0.8	\$1.6	N/A	N/A	N/A	-	\$1.9	
Tomahawk provides an attack capability against targets at sea (Antiship Tomahawk) and on land (Land Attack Tomahawk), and can be launched from both surface ships (RGM) and submarines (UGM). The Land Attack version can be fitted with either conventional high explosives, nuclear warheads or submunition dispenser.													
Tomahawk consists of four variants: (1) RGM/UGM-109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser.													
The antiship version has a modified HARPOON missile guidance system. This system permits firing in the general direction of any enemy warship at low altitude to avoid detection by radar. At a programmed distance, the missile commences a search to seek out and acquire the target ship with active radar.													
The land-attack version has inertial guidance updated by a terrain contour matching (TERCOM) system. The inertial equipment is provided with the known location of the launch platform and target prior to launch. The system then controls the missile on a preprogrammed flight-path to the target. While the missile is flying over land, the TERCOM equipment compares taped digital map actual terrain references to the missile's position and corrects its course to the target. In the conventional land-attack missile, a Digital Scene Matching Area Correlator (DSMAC) compares stored photographic scenes with those observed through an optical lens, to achieve improved terminal accuracy.													
Tomahawk planned procurement of 164 RGM/UGM-109C, Land Attack Conventional variants, in FY1996. Congressional direction was to achieve quantity using a combination of FY 1995 and FY 1996 funds. Consequently, the FY 1995 column includes 57 units of the previous FY 1996 planned quantity of 164; the FY 1996 column reflects the remaining 107 units. Planned procurement for FY 1997 is 120 RGM/UGM-109C, Land Attack Conventional variants.													
Characteristics and dimensions (approximate)													
Weight (with booster and capsule) (UGM-109)			4,300 pounds										
Weight (with booster and canister) (RGM-109)			4,000 pounds										
Length (with booster)			20.5 feet										
Wing Span			8.6 feet										
Cruise Speed			High Subsonic										
Contractor:			Hughes Missiles Systems Company.										

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. Appropriation/Budget Activity Title/No Weapons Procurement, Navy Other Missiles/2	B. Weapon Model/Series/Popular Name TOMAHAWK (J2EL) (PEO(CU)) (BLI: 210100)		C. Manufacturer Name Plant City/State Location Hughes Missile Systems Co Tucson AZ		D. Date Mar-96	
		FY95 QTY **	UNIT \$	TOTAL	FY96 QTY	UNIT \$	TOTAL
WEAPON SYSTEM COST ELEMENTS							
FLYAWAY							
ALL-UP-ROUND (AUR)	** FY95 AUR Quantity includes: 57 units complete with Engine; 217 units for which Engines were procured separately.	274	617	169,153	107	667	71,333
ENGINE		217	128	27,671			
TOTAL HARDWARE		274	718	196,824	107	667	71,333
PROCUREMENT SUPPORT							
SYSTEMS ENGRG MGT INTEGRATION (SEMI)				11,777			2,762
PRODUCTION ENGINEERING				16,747			20,148
PRODUCT IMPROVEMENT				34,933			13,763
TOTAL NONRECURRING				63,457			36,673
TOTAL FLYAWAY		274	950	260,281	107	1,009	108,006
FLEET SUPPORT							
SUPPORT EQUIPMENT				115			974
TRAINING EQUIPMENT				887			0
DOCUMENTATION				810			376
THEATER MISSION PLANNING CENTER (TMPC)				2,385			2,129
TOTAL FLEET SUPPORT				4,197			3,479
GROSS WEAPON SYSTEM		274	965	264,478	107	1,042	111,485
TOTAL PROCUREMENT COST				264,478			111,485
INITIAL SPARES				3,277			5,653
MODIFICATIONS				17,310			47,884
TOTAL PROGRAM COST				285,065			165,022
							95,956

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)											A. DATE
APPROPRIATION/BUDGET ACTIVITY: WEAPONS PROCUREMENT, NAVY 2/OTHER MISSILES			P-1 ITEM NOMENCLATURE: TOMAHAWK (J2EL) (PEO(CU)) (BLI: 210100)								
Cost Element/ FISCAL YEAR	CONTRACTOR LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REVISION REQUIRED	IF YES, WHEN AVAIL	
ALL-UP-ROUND											
FY95**	Hughes Missile	SS/OPT	NAVAIR	Jan-95	Oct-96	274	718	YES	NO		
FY96	Systems Co	SS/OPT	NAVAIR	Jan-96	Oct-97	107	667	YES	NO		
FY97	Tucson AZ	SS/OPT	NAVAIR	Jan-97	Oct-98	120	612	YES	NO		

**NOTE: Includes 57 units originally planned for procurement with FY 1996 funds. Date of first delivery is October 1997.

FY 1997 BUDGET PRODUCTION SCHEDULE										P-1 Item Nomenclature Tomahawk (J2EL) (PEO(CU)) (BLI: 210100)										Date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Item/Manufacturer/Procurement Year										S E R V										Accep. Prior to 1-Oct										Balance due as of 1-Oct										Fiscal Year 95										Fiscal Year 96										LATER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
																																								CY 94										Calendar Year 95										Calendar Year 96																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

FY 1997 BUDGET PRODUCTION SCHEDULE										P-1 Item Nomenclature Tomahawk (J2EL) (PEO(CU)) (BLI: 210100)										Date																				
Item/Manufacturer/Procurement Year										Fiscal Year 97										Fiscal Year 98										LATER										
										CY 96										Calendar Year 97										Calendar Year 98										
S	E	R	V	Proc Qty	Accep. Prior to 1-Oct	Balance due as of 1-Oct	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep										
HUGHES MISSILE SYSTEMS COMPANY R/UGM-109C (LAND ATTACK CONVENTIONAL)/FY 95 HUGHES MISSILE SYSTEMS COMPANY R/UGM-109C (LAND ATTACK CONVENTIONAL)/FY 95 (FY 95 funded units of planned FY 96 procurement) HUGHES MISSILES SYSTEM COMPANY R/UGM-109C (LAND ATTACK CONVENTIONAL)/FY 96							0	217																																
							0	57																	4	4	4	4	5	5	5	5	5	5	6					
							0	107																		9	9	9	9	9	9	9	9	9	9	8				
TOTAL							0	381																																
Manufacturer's Name and Location HUGHES - Tucson AZ							PRODUCTION RATES					PROCUREMENT LEAD TIME										REMARKS																		
							Minimum	2-8-5	Maximum	Reached D+	ADMIN LEAD TIME					MANU-FACTURING TIME					TOTAL					Schedule reflects completed missile deliveries to the government.														
							N/A	20	50		Prior 1-Oct					After 1-Oct					1-Oct																			
											6					3					21					24														

FY 1997 BUDGET PRODUCTION SCHEDULE										P-1 Item Nomenclature Tomahawk (J2EL) (PEO(CU)) (BLI: 210100)										Date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Item/Manufacturer/Procurement Year										S E R V										Accep. Prior to 1-Oct										Balance due as of 1-Oct										Fiscal Year 99										Fiscal Year 00										LATER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
																																								CY 98										Calendar Year 99										Calendar Year 00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

WEAPONS PROCUREMENT, NAVY BUDGET ITEM JUSTIFICATION SHEET				DATE: March 1996						
APPROPRIATION/BUDGET ACTIVITY WPN-2, Other Missiles			P-1 ITEM NOMENCLATURE AMRAAM AIM-120							
	Prior Years	FY95	FY96	FY97	FY98	FY99	FY00	FY01	To Complete	Total Program
QUANTITY	842	106	115	37	84	82	84	80	1,006	2,436
COST (\$M)	716.4	74.1	73.6	36.1	61.5	62.4	64.0	62.3	727.4	1,877.7
Initial Spares (\$M)	19.8	0.9	1.2	2.4	2.0	2.4	2.2	1.8	18.6	51.3
Total (\$M)	736.2	75.0	74.8	38.5	63.5	64.8	66.2	64.1	746.0	1,929.0
Unit										
Cost (\$M)	0.874	0.707	0.650	1.042	0.756	0.790	0.789	0.801	0.742	0.792
MISSION AND DESCRIPTION:										
The Advanced Medium Range Air-to-Air Missile (AMRAAM) is the next generation all-weather, all-environment radar guided missile developed by the Air Force and Navy to augment the AIM-7 Sparrow. AMRAAM is smaller, faster, lighter, and has improved capabilities against very low-altitude and high-altitude high-speed targets in an electronic countermeasure environment. AMRAAM incorporates an active radar in conjunction with an inertial reference unit and microcomputer system which makes the missile less dependent upon the aircraft fire control system. This advanced capability enables the pilot to aim and fire several missiles at multiple targets.										
FY 1997 PROGRAM JUSTIFICATION:										
37 missiles will be procured in FY 1997 along with non-recurring supports costs such as; government field activity technical, test, and logistics support, procurement of test articles, containers, handling equipment, special tooling and test equipment to support the AIM-120C configuration, and procurement of peculiar support equipment in support of the all-up-round and component depot.										
Qty Summary:										
Navy		FY95	FY96	FY97	FY98	FY99	FY00	FY01		
		106	115	37	84	82	84	80		
Air Force		461	291	133	158	173	227	228		
FMS/Other		565	891	650	500	500	500	500		
Total		1,132	1,297	820	742	755	811	808		

P-1 Shopping List

Item No. 6 Page No. 1

EXHIBIT P-40

023

WEAPONS PROCUREMENT, NAVY
FY 1997 PRESIDENT'S BUDGET

DOLLARS IN MILLIONS
MISSILE COST SHEET
EXHIBIT P-5

March 1996

MISSILE: AMRAAM

	FY95 QTY	QTY U/C	106 TOTAL	FY96 QTY	QTY U/C	115 TOTAL	FY97 QTY	QTY U/C	37 TOTAL
HARDWARE:									
GUIDANCE & CONTROL	106	0.291	30.853	115	0.257	29.583	37	0.307	11.352
PROPULSION	106	0.026	2.743	115	0.023	2.630	37	0.027	1.009
WARHEAD	106	0.006	0.686	115	0.006	0.657	37	0.007	0.252
ECO	106	0.076	8.095	115	0.010	1.196	37	0.020	0.747
TOTAL RECURRING FLYAWAY	106	0.400	42.377	115	0.296	34.066	37	0.361	13.360
NON RECURRING:									
PRODUCTION TECH SUPPORT			16.642			14.900			8.469
ST&TE			1.299			0.090			1.660
CONTAINERS			0.144			0.360			0.200
PRODUCTION TEST			4.541			9.949			5.110
TOTAL			22.626			25.299			15.439
TOTAL FLYAWAY	106	0.613	65.003	115	0.516	59.365	37	0.778	28.799
FLEET SUPPORT:									
TEST EQUIPMENT			3.071			7.310			2.810
HANDLING EQUIPMENT			0.160			0.160			0.190
TRAINING EQUIPMENT			0.648			0.000			0.000
ILS			5.066			6.655			4.112
DATA & PUBS			0.154			0.146			0.180
TOTAL FLEET SUPPORT			9.099			14.271			7.292
WEAPON SYSTEM COST	106	0.699	74.102	115	0.640	73.636	37	0.975	36.091
INITIAL SPARES			0.878			1.159			2.354
TOTAL PROCUREMENT COST	106	0.707	74.980	115	0.650	74.795	37	1.039	38.445

P-1 Shopping List

Item No. 6 Page No. 2

EXHIBIT P-5

P-5a

WEAPONS PROCUREMENT, NAVY								A. DATE		
PROCUREMENT HISTORY & PLANNING								March 1996		
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE						
2 Other Missiles				AMRAAM AIM-120						
LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	FLYAWAY UNIT COST	SPECS AVAIL NOW	SPEC REVIS REQ'D	IF NO, WHEN AVAIL
AMRAAM										
FY95	Lot IX Hughes, Tucson AZ Raytheon Lowell MA	C/FP C/FP	ASC/AFMC ASC/AFMC	03/7/95 03/7/95	12/96 12/96	46 60	317 291	Yes Yes	No No	
FY96	Lot X Hughes, Tucson AZ Raytheon Lowell MA	C/FP C/FP	ASC/AFMC ASC/AFMC	01/29/96 01/29/96	12/97 12/97	60 55	268 275	Yes Yes	No No	
FY97	Lot XI TBD	C/FP	ASC/AFMC	01/31/97	12/98	37	361	Yes		
REMARKS:										

P-1 Shopping List

EXHIBIT P-5a

Item No. 6 Page No. 3

025

BUDGET ITEM JUSTIFICATION SHEET											
APPROPRIATION/BUDGET ACTIVITY:			P-1 ITEM NOMENCLATURE:								
WEAPONS PROCUREMENT, NAVY			HARPOON (J2EH) (PEO(CU)) (2224)								
2/OTHER MISSILES											
QUANTITY	Prior Years		FY95	FY96	FY97	FY98	FY99	FY00	FY01	To Complete	Total Program
	3,928		58	75	0	0	0	0	0	-	4,061
COST (In Millions)	\$3,454.0		\$66.8	\$83.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-	\$3,603.9
Initial Spares (In M)	\$180.4		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-	180.4
Total (In Millions)	\$3,634.4		\$66.8	\$83.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-	\$3,784.3
Unit Cost (In Millions)	\$.925		\$1,152	\$1,108	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-	\$.931

HARPOON provides a ship, air and submarine-launched all weather anti-ship cruise missile capability effective against enemy destroyers, light cruisers, surfaced submarines, patrol craft, and other (e.g., merchant, surveillance, etc.) enemy shipping. The Standoff Land Attack Missile (SLAM) variant is effective against fixed targets and ships in harbor.

HARPOON uses attitude reference mid-course guidance with an active or passive seeker for target acquisition and terminal guidance. The missile may be launched from the following platforms:

- Ship-Launch Platforms: FFTT (formerly FF-1052), DDG and DD963, CG, CGN, and FFG-7 Class Ships
- Air-Launch Platforms: P-3, A-6, F/A-18, B-52G
- Sub-Launch Platforms: 594, 637, 688 Classes

Funding in 1996 of 83.2 million will procure 75 SLAM All-Up-Round missiles for the USN Navy. The SLAM variant is a day/night, adverse-weather capable weapon which can be deployed aboard aircraft carriers and launched from existing AGM (Air-to-Ground) equipped/Walleye data link equipped A-6E SWIP (Systems Weapon Integration Program) and F/A-18 aircraft. Simultaneous production of FMS Harpoon and USN SLAM is synergistic for maintaining reasonable unit pricing. FY 1996 represents the final procurement of SLAM All-Up-Round missiles for the U.S. Navy. This production profile will allow for a smooth transition to SLAM-ER modification in FY 1997.

REAL \$

HARPOON / SLAM
FY1996/1997 PRESIDENT BUDGET ESTIMATE

LINE ITEM NAME	FY95 QTY	QUANTITY UNIT COST	58 TOTAL COST	FY96 QTY	QUANTITY UNIT COST	75 TOTAL COST	FY97 QTY	QUANTITY UNIT COST	0 TOTAL COST
MISSILE HARDWARE:									
HMB/SYS ENGR/DATA	58	0.471495	27.347	75	0.475413	35.656	0	0.000000	0.000
ECO	58	0.026609	1.543	75	0.026830	2.012	0	0.000000	0.000
IMPROVED HARPOON	58	0.000000	0.000	75	0.000000	0.000	0	0.000000	0.000
SLAM UNIQUE	58	0.335803	19.477	75	0.338594	25.395	0	0.000000	0.000
ENGINE	58	0.088587	5.138	75	0.089323	6.699	0	0.000000	0.000
WARHEAD	58	0.037335	2.165	75	0.037646	2.823	0	0.000000	0.000
WINGS & FINS	58	0.021645	1.255	75	0.021825	1.637	0	0.000000	0.000
OTHER HARDWARE									
EXERCISE SECTION	58	0.000000	0.000	75	0.000000	0.000	0	0.000000	0.000
TOTAL HARDWARE	58	0.981474	56.925	75	0.989631	74.222	0	0.000000	0.000
RECURRING PROD SUPPORT									
NWS AUR ASSY			0.000			0.000			0.000
GOVT IN-HOUSE			3.971			4.058			0.000
GOVT TEST PROGRAM			0.000			0.000			0.000
TOTAL REC PROD SUPT			3.971			4.058			0.000
TOTAL REC FLYAWAY COSTS	58	1.049939	60.896	75	1.043737	78.280	0	0.000000	0.000
NON-RECURRING COSTS:									
TOOLING/TEST EQPT			0.000			0.000			0.000
CONTAINERS			0.000			0.000			0.000
PRODUCT IMPROVEMENT			0.000			0.000			0.000
IMPROVED HARPOON			0.000			0.000			0.000
TOTAL NON REC COST			0.000			0.000			0.000
TOT MISSILE FLY COST	58	1.049939	60.896	75	1.043737	78.280	0	0.000000	0.000
FLEET SUPPORT									
TEST EQPT			0.000			0.000			0.000
HANDLING EQPT			0.000			0.000			0.000
TRAINING			1.430			0.250			0.000
DATA & PUB			0.000			0.000			0.000
ILS SERVICES			4.482			4.552			0.000
TOTAL FLEET SUPPORT			5.912			4.802			0.000
WEAPONS SYSTEM COST	58	1.151870	66.808	75	1.107764	83.082	0	0.000000	0.000
MODIFICATION			5.410			2.592			22.893
TOTAL PROGRAM COST	58	1.245146	72.218	75	1.142324	85.674	0	0.000000	22.893

BUDGET PROCUREMENT HISTORY AND PLANNING										
BUDGET ACTIVITY: 2/OTHER MISSILES		P-1 ITEM NOMENCLATURE: AGM-RGM-UGM-8 HARPOON (J2EH) (PEO(CU)) (2224)								
ELEMENT OF COST FISCAL YEAR	CONTRACTOR LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REVISION REQUIRED	IF YES, WHEN AVAIL
ALL-UP-ROUND FY95 FY96	MCDONNELL DOUGLAS CORPORATION ST. LOUIS, MO	SS/FFP SS/FFP	NAVAIR NAVAIR	Aug-95 May-96	Jan-97 Jan-98	58 75	981 990	YES YES	NO NO	
D. REMARKS										

FY 97 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Harpoon/SLAM Missile Systems

Date

ITEM/MANUFACTURER/ PROCUREMENT YEAR	S E R V	PROC. QTY	ACCEP. PRIOR TO 1 OCT 1995	BALANCE DUE AS OF 1 OCT 1995	FISCAL YEAR		CALENDAR YEAR		FISCAL YEAR		CALENDAR YEAR		1997
					1995	1996	1995	1996	1995	1996	1995	1996	
					O C T 1	N O V 1	D E C 1	J A N 1	F E B 1	M A R 1	A P R 1	M A Y 1	
Harpoon/SLAM													
McDonnell Douglas Corporation													
FY-94 (See Note 1)	USN	75	0	75	6	0	6	5	3	4	6	8	8
	FMS	56	0	56	4	4	4	6	8	7	5	3	4
FY-95	USN	58	0	58									
	FMS	93	0	93									
FY-96	USN	75	0	75									
	FMS	50	0	50									
Note 1: FY-94 schedules have been adjusted for actual USN/FMS deliveries through Jan 1996.													
TOTAL													

MANUFACTURER'S NAME AND LOCATION	PRODUCTION RATES			REACHED D +	PROCUREMENT LEAD TIME					REMARKS
	MINIMUM QTY.	1 - 5	MAXIMUM		ADMIN LEAD TIME		MANU- FACTURING TIME	TOTAL AFTER 1 OCT		
					BEFORE 1 OCT	AFTER 1 OCT				
McDonnell Douglas Corporation St. Charles, MO	9		55			12	7	20	27	Provide required data for FY CY through FY 97 + 4. *Estimated quantity No signed LOAs be- yond FY-96.

FY 97 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Harpoon/SLAM Missile System

Date

ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR 1997												FISCAL YEAR 1998												FISCAL YEAR 1999												FISCAL YEAR 2000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	1997												1998												1999												2000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	O	N	E	C	I	A	M	P	A	R	V	C	O	I	A	M	P	A	R	V	C	O	I	A	M	P	A	R	V	C	O	I	A	M	P	A	R	V	C	O	I	A	M	P	A	R	V	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														</

Provides required data for FY CY through FY 2014.
*Estimated quantity. No signed LOAs beyond FY-96.

THIS PAGE LEFT INTENTIONALLY BLANK

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

DATE:

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE #223000
Joint Standoff Weapon System (JSOW)

2 - OTHER MISSILES

QUANTITY	FY - 1995	FY - 1996	FY - 1997	FY - 1998	FY - 1999	FY - 2000	FY - 2001	To Complete	Total Program
	N/A	N/A	100	186	546	798	976	15,194	17,800
COST (In Millions)	\$0.0	\$25.5	\$64.4	\$95.6	\$200.2	\$304.5	\$471.7	\$6,446.2	\$7,608.1
Initial Spares (In Millions)	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2	\$1.5	\$2.7	\$246.5	\$251.9
Total (In Millions)	\$0.0	\$25.5	\$64.4	\$95.6	\$201.4	\$306.0	\$474.4	\$6,692.7	\$7,860.0
Unit Cost (In Millions)	N/A	N/A	\$0.644	\$0.514	\$0.369	\$0.383	\$0.486	\$0.440	\$0.442

The Joint Standoff Weapon System (JSOW) program provides an air-to-ground glide weapon (AGM-154) capable of attacking a variety of targets during day, night and adverse weather conditions for use against fixed area targets. The JSOW will enhance aircraft survivability as compared to current interdiction weapon systems by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems. The JSOW Global Positioning System (GPS) / Inertial Navigation System (INS) capability will allow several target kills per aircraft sortie. The JSOW Baseline variant (AGM-154A) will be integrated on to USN and USAF aircraft, and has a planned inventory of 11,800 units. The US Navy will procure an inventory of 8,800 All-Up-Rounds (AUR's) for integration on to F/A-18 and AV-8B aircraft, and the USAF will procure an inventory of 3,000 AUR's for integration on to F-16 C/D and B-1B aircraft for a total of 11,800 JSOW Baselines. Limited Rate Initial Production (LRIP) commences in the USN FY 97 program.

The JSOW program is a joint program with the US Air Force; the US Navy is the executive service. The JSOW Baseline system (AGM-154A) is designed for pre-planned product improvements (P3I) with two (2) variant systems planned for procurement by the US Navy and Air Force. The BLU-108 variant and the Unitary Warhead variant commence production in the USN FY 99 program.

The FY 96 program provides for the procurement of Special Tooling and Special Test Equipment (ST/STE) required for the manufacture of the LRIP units in FY 97. The ST/STE will be executed on the current Engineering and Manufacturing Development (E&MD) contract with Texas Instruments, the prime contractor.

The FY 97 budget request provides for the initial procurement of 100 AGM-154A AUR's. Other contractor costs include AUR containers, telemetry units, warranty, and technical data. Government in-house costs include production technical support and Integrated Logistics Support (ILS) costs.

Quantities	FY-97	FY-98	FY-99	FY-00	FY-01
USN (Baseline)	100	186	517	503	284
USN (BLU-108)	0	0	8	244	364
USN Unitary	0	0	21	51	328
USAF (Baseline)	0	22	77	102	139
USAF (BLU 108)	0	0	15	58	102
TOTAL FY Qty	100	208	638	958	1217

UNCLASSIFIED

P-1 SHOPPING LIST

Exhibit P-40

ITEM NO. 8

PAGE NO. 1

UNCLASSIFIED WEAPON SYSTEM COST ANALYSIS									
P-1 ITEM NOMECLATURE									
1. FLYAWAY COST	FY-95 (QTY: 0)		FY-96 (QTY: 0)		FY-97 (QTY: 100)				
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
JSOW AGM-154A SYSTEM									
MISSILE HARDWARE-RECURRING									
BASELINE (AGM-154A) ALL UP ROUND (AUR)	0			0			100	0.548	54.766
CONTRACTOR (WARRANTY/ECO/DATA)									2.405
TOTAL HARDWARE	0		0.000	0		0.000	100	0.572	57.171
RECURRING PRODUCTION SUPPORT									
GOV'T IN-HOUSE/ PRODUCTION SUPPORT									
TOTAL	0		0.000	0		0.000			5.131
TOTAL RECURRING FLYAWAY	0		0.000	0		0.000	100	0.623	62.302
NONRECURRING AND ANCILLARY EQUIP									
SPECIAL TOOLS AND TEST EQUIPMENT						25.458			0.000
CONTAINERS						0.000			0.920
TELEMETRY						0.000			0.338
CONTRACTOR (COMMAND & LAUNCH/ST&E/MISSION/SW)						0.000			0.000
TOTAL	0		0.000	0		25.458			1.258
TOTAL MISSILE FLYAWAY	0		0.000	0		25.458	100	0.636	63.560
FLEET SUPPORT COST									
PECULIAR SUPPORT EQUIPMENT			0.000			0.000			0.000
ILS / SUPPORT			0.000			0.000			0.866
TOTAL SUPPORT COSTS	0		0.000	0		0.000			0.866
WEAPONS SYSTEM COST	0		0.000	0		25.458	100	0.644	64.426
INITIAL SPARES	0		0.000	0		0.000	0	0.000	0.000
TOTAL PROCUREMENT COST	0		0.000	0		25.458	100	0.644	64.426

FOOTNOTE: For this Code B item, please refer to Program Element 0604727N in the RDT&E,N Budget.

PROCUREMENT HISTORY & PLANNING										DATE
B. APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE					SUBHEAD NO:
WPN/B.A. 2 - Other Missiles					#223000 Joint Standoff Weapon					TBD
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAIL NOW	SPEC REVIS REQ'D	IF YES, WHEN AVAIL
FY-96	Special Tools/ Test Equipment TEXAS INSTRUMENTS (Lewisville, TX)	CPIF (opt on E&MD)	NAVAIR	Mar 96	Dec 96	Lot	N/A	N/A	No	
FY-97	LRIP TEXAS INSTRUMENTS (Lewisville, TX)	CPIF (opt on E&MD)	NAVAIR	Dec 96	Jul 98	100	.572	N/A	No	
REMARKS: FY-96 buy is for production Special Tools and Test Equipment. Delivery supports manufacture of LRIP units (FY-97).										

P-1 Shopping List

EXHIBIT P-5a

Item No. 8 Page 3

UNCLASSIFIED

437

[illegible]

THIS PAGE LEFT INTENTIONALLY BLANK

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										DATE: MARCH 1996	
P-40											
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE	
WEAPONS PROCUREMENT, NAVY										STANDARD MISSILE (SM-2 MR/ER) 12FE	
BA-2 OTHER MISSILES											
	PRIOR YEARS	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001			
QUANTITY	9,845	188	17	99	132	127	148	150			
COST (in Millions)	\$5,869.2	\$240.4	\$125.4	\$197.5	\$224.3	\$280.2	\$278.5	\$280.9			
Initial Spares (in Millions)	\$132.1	\$4.0	\$6.6	\$4.6	\$6.8	\$10.3	\$10.0	\$13.7			
Total (in Millions)	\$6,001.3	\$244.4	\$132.0	\$202.1	\$231.1	\$290.5	\$288.5	\$294.6			
Unit Cost (in Millions)	\$0.6	\$1.3	\$7.8	\$2.0	\$1.8	\$2.3	\$1.9	\$2.0			

(U) PROGRAM OVERVIEW: The STANDARD Missile SM-2 Medium Range (MR) and Extended Range (ER) are solid-propellant, tail controlled surface-to-air and surface-to-surface missiles with midcourse guidance, semi-active homing guidance and home-on jamming capability, and proximity and contact fuzing. The SM-2 Block II is deployed on TARTAR New Threat Upgrade ships, AEGIS CG-47/51 cruisers and AEGIS DDG-51 destroyers. The SM-2 Block III/IIIA are deployed on AEGIS CG-47/51 cruisers and TARTAR CG/ New Threat Upgrade ships. The SM-2 Block IIIB and Block IV will be deployed on AEGIS/VLS ships.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

ITEM NO. 9 PAGE NO.1

UNCLASSIFIED

UNCLASSIFIED

MISSILE SYSTEM COST ANALYSIS

Date: MARCH 1996

Classification: UNCLASSIFIED

Missile: STANDARD SM-2 (12FE)		FY 1995		FY 1996 *		FY 1997	
	QTY	UNITS	TOT COST	QTY	UNITS	QTY	UNITS
FLYWAY COSTS	188			17		99	
FLIGHT HARDWARE							
GCA/MK72 BOOSTER (FE001)	160	\$359.5	\$57,523				
AEGIS BLK IIIA							
AEGIS BLK IIIB	28	\$2,194.4	\$61,442	17	\$2,232.7	51	\$439.5
AEGIS BLK IV						48	\$1,304.8
AEGIS BLK IVA							
REQ FOR EQU ADJ/WARRANTY THRESHOLD			\$3,879				
PROPULSION							
MK 104 DTRM (FE009)	188	\$53.1	\$9,986	17	\$49.4	99	\$68.8
ORDNANCE							
MK 54 S&A DEVICE (FE003)	188	\$6.4	\$1,208	17	\$5.9	99	\$6.4
MK 45 TDD MOD 9/10 (FE005)	188	\$53.5	\$10,062	17	\$49.8	99	\$63.6
WARHEAD							
MK 125 (FE006)	188	\$16.5	\$3,101	17	\$15.0	99	\$15.9
PROCUREMENT SUPPORT							
CONTRACTOR ENGINEERING (FE830)			\$66,946				\$59,264
GOVERNMENT IN-HOUSE ENGINEERING (FE830)			\$18,732				\$21,464
QUALITY ASSURANCE (FE840)			\$13,235				\$6,410
DOCUMENTATION (FE954)			\$2,726				\$2,460
PRODUCTION PROOF (FE955)			\$1,894				\$1,551
EVAL SERV & MATL (FE860)			\$5,932				\$5,849
			\$24,427				\$21,530
TOTAL RECURRING FLYWAY	188		\$214,145	17		99	\$159,614
CONTAINERS (FE957)			\$1,367				\$1,448
TOOLS AND TEST EQUIP (FE950)			\$5,824				\$6,300
COMPONENT IMPROVEMENTS (FE850)			\$4,338				\$5,887
TOTAL NONRECUR FLYWAY COSTS			\$11,529				\$13,635
TOTAL FLYWAY COSTS	188	\$1,200.4	\$225,674	17	\$6,680	99	\$173,249
GROUND EQUIP/FLEET SUPT			\$14,723				\$24,214
INSTAL & CHECKOUT EQUIP (FE970)			\$3,340				\$11,523
SPECIAL HANDLING EQUIP (FE971)			\$965				\$702
TRNG MTLXP & NON-EXP (FE972)			\$7,849				\$9,002
FLEET DOCUMENTATION (FE973)			\$936				\$1,560
ILS (FE980)			\$1,633				\$1,427
TOTAL MISSILE COSTS	188	\$1,278.7	\$240,397	17	\$7,376	99	\$197,463
INITIAL SPARES			\$3,968				\$4,611
MODIFICATION			\$32,375				\$18,540
TOTAL PROGRAM COST			\$276,740				\$220,614

*FY96 quantities have been reduced due to delays in the Block IIIB development program, to fund test equipment upgrades for the Block IIIB and IV variants, and fund non-recurring costs associated with the Block IV variant

ITEM NO. 9 PAGE NO.-2

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING										DATE: MARCH 1996	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE					SUBHEAD	
WEAPONS PROCUREMENT, NAVY					STANDARD MISSILE (SM-2 MR/ER)					12FE	
OTHER MISSILES											
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAILABLE
UNIQUE SM-2 MR/ER HARDWARE FE001	GUIDANCE & CONTROL & AUTOPILOT/MK72 BOOSTER FY 85-BLK IIIA AEGIS FY 85-BLK IV AEGIS FY 86-BLK IV AEGIS FY 87-BLK IIIB AEGIS FY 87-BLK IV AEGIS	SMC-MCLEAN, VA. SMC-MCLEAN, VA. SMC-MCLEAN, VA. SMC-MCLEAN, VA. SMC-MCLEAN, VA.	FFPI/AF CPAF CPAF FFPI/AF FFPI/AF	NAVSEA NAVSEA NAVSEA NAVSEA NAVSEA	11/85 03/86 03/86 01/87 01/87	11/87 08/87 03/88 01/88 01/88	160 28 17 51 48	\$359.5 \$2,184.4 \$2,232.7 \$438.5 \$1,304.8	YES YES YES YES YES	NO NO NO NO NO	
COMMON HARDWARE FE009	QTRM MK 104 FY 85 MOD 23 FY 86 MOD 23 FY 87 MOD 23	ARC-Camden, AR. ARC-Camden, AR. ARC-Camden, AR.	SS/FFP/PI SS/FFP/PI SS/FFP/PI	NAVSEA NAVSEA NAVSEA	06/85 03/86 03/87	01/87 10/87 10/88	188 17 99	\$53.1 \$49.4 \$68.8	YES YES YES	NO NO NO	
FE003	SAFETY AND ARMING DEVICE FY 85 MK 54 FY 86 MK 54 FY 87 MK 54	KAMAN, Middletown, CT. KAMAN, Middletown, CT. KAMAN, Middletown, CT.	SS/FFP SS/FFP SS/FFP	NAVSEA NAVSEA NAVSEA	08/85 03/86 03/87	10/86 10/87 10/88	188 17 99	\$6.4 \$5.9 \$6.4	YES YES YES	NO NO NO	
FE005	ORDNANCE MK 45 IQQ FY 85 MOD 8/10 FY 86 MOD 8/10 FY 87 MOD 8/10	MOTOROLA - Scottsdale, AZ MOTOROLA - Scottsdale, AZ MOTOROLA - Scottsdale, AZ	SS/FFP/PI SS/FFP/PI SS/FFP/PI	NAVSEA NAVSEA NAVSEA	07/85 06/86 06/87	10/86 10/87 10/88	188 17 99	\$53.5 \$49.8 \$63.6	YES YES YES	NO NO NO	
FE006	WARHEAD FY 85 MK 125 FY 86 MK 125 FY 87 MK 125	HERCULES - Magna, UT. HERCULES - Magna, UT. HERCULES - Magna, UT.	SS/FFP SS/FFP SS/FFP	NAVSEA NAVSEA NAVSEA	04/85 04/86 04/87	10/86 10/87 10/88	188 17 99	\$16.5 \$15.0 \$15.9	YES YES YES	NO NO NO	
REMARKS											

DD FORM 2446.1, JUL 87

P-1 SHOPPING LIST CLASSIFICATION:
ITEM NO.-9 PAGE NO. - 3

EXHIBIT P-5A

UNCLASSIFIED

043

UNCLASSIFIED

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET										DATE: MARCH 1996	
P-40											
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE	
WEAPONS PROCUREMENT, NAVY / 2-OTHER MISSILES										RIM 116A - ROLLING AIRFRAME MISSILE (RAM) - 12EF	
		FY 1995	FY 1996	FY 1997	FY 1998	FY 2000	FY 2001	TO COMPLETE	TOTAL PROGRAM		
QUANTITY	680	240	230	140	60	0	0				
COST (In Millions)	\$297.3	\$66.4	\$67.2	\$48.7	\$33.2	\$36.2	\$36.1				
Initial Spares (In Millions)	\$2.3	\$0.0	\$0.5	\$1.2	\$1.6	\$2.3	\$1.3				
Total (In Millions)	\$299.6	\$66.4	\$67.7	\$49.9	\$34.8	\$37.5	\$37.4				
Unit Cost (In Millions)	\$0.4	\$0.3	\$0.3	\$0.5	\$0.6	N/A	N/A				

ITEM DESCRIPTION/JUSTIFICATION:

Rolling Airframe Missile (RAM) is a high fire-power, low cost, lightweight complementary self-defense system to engage anti-ship missiles. It has dual-mode passive Radio Frequency/Infrared (RF/IR) guidance and will be fired from a RAM Guided Missile Launching System (MK-49) which holds 21 RAM rounds. Approval for full rate production, Milestone III was granted on 6 May 1993.

FY95 funds procured 240 Block 0 Missiles.
FY96 funds will procure 200 Block 0 and 30 Block 1 Missiles.
FY97 funds will procure 100 Block 0 Missiles and 40 Block 1 Missiles.
FY98 funds will procure 60 Block 1 Missiles.
FY99 funds will procure 200 Block 1 Missiles and 160 Block 1 Missile upgrade retrofit kits.
FY00 and FY01 funds will procure 180 Block 1 Missile upgrade retrofit kits each year.

COOPERATIVE AGREEMENTS:

RAM is a NATO cooperative project with the Federal Republic of Germany. The RAM production MOU, approved and signed by the US and Germany (GE) on 3 August 1987, specifies production procedures for the Guided Missile Round Pack and coproduction of the Guided Missile Launching System. Missile limited production contracts were awarded to US (General Dynamics/Air Defense Systems Division) and German (RAM System GmbH) sources in 1989. As a result of the reduced US missile quantities and a desire to maintain production capabilities in both countries, an arrangement between the US and German producers, for single source, coproduction of the German full-rate production quantities, was approved by both governments in November 1992 and the arrangement continues for U.S. rate production. In August 1992, the acquisition of General Dynamics by Hughes Aircraft Company was approved, making Hughes Missile Systems Co. the US prime contractor.

CLASSIFICATION:

PAGE NO. 1

P-1 SHOPPING LIST
ITEM NO. 10

DD Form 2454, JUN 86

UNCLASSIFIED

047

UNCLASSIFIED

WEAPONS PROCUREMENT, NAVY
WEAPON SYSTEM COST ANALYSIS

DATE: MARCH 1996

048

TOTAL COST IN THOUSANDS OF DOLLARS										
FY 1995 (QTY 240)				FY 1996 (QTY 230)				FY 1997 (QTY 140)		
QTY	UNIT COST	TOTAL COST		QTY	UNIT COST	TOTAL COST		QTY	UNIT COST	TOTAL COST
MISSILE:										
ROLLING AIRFRAME MISSILE (RAM)										
MODEL: RIM 116A										
FLIGHT HARDWARE										
G&CA (INCLUDING I & A)	240	216.7	61,271	200	235.6	47,125	63,494	100	282.6	28,255
BLOCK 1				30	309.9	9,298	433	40	307.1	12,284
COMPONENT IMPROVEMENT			113							478
PROPULSION	240	15.1	3,614	230	8.0	1,844		140	8.2	1,148
ORDNANCE PACK (TD)	240	19.4	4,644	230	10.5	2,415		140	10.7	1,503
WARHEAD	240	1.5	371	170	2.4	411		140	2.2	308
SAFE & ARM DEVICE	240	2.2	529					140	2.4	336
TELEMETER for BLOCK 0				30	35.7	1,071				
TELEMETER for BLOCK 1				30	29.9	897				
PROCUREMENT SUPPORT			4,899			2,944				3,917
CONTRACTOR ENGINEERING										317
GOVT IN-HOUSE ENGINEERING			3,960			2,346				3,000
PRODUCTION ACCEPTANCE			939			598				600
TOTAL RECURRING FLYWAY	240	275.7	66,170	230	288.9	66,438		140	344.5	48,229
NON-RECURRING PROC SUPT										314
TOOLS & TEST EQUIPMENT										314
TOTAL FLYAWAY COSTS	240	275.7	66,170	230	288.9	66,438		140	346.7	48,543
FLEET SUPPORT COSTS			181			760				120
ILS			181			100				120
CONTAINERS				300	2.2	660				
EF974										
EF957										
TOTAL MISSILE COSTS	240	276.5	66,351	230	292.2	67,198		140	347.6	48,663
CURRENT CONTROL			66,351			67,198				48,663
INITIAL SPARES			42			549				1,180
TOTAL PROGRAM			66,393			67,747				49,843

P-1 SHOPPING LIST
ITEM NO. 10 PAGE 2CLASSIFICATION
UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING

DATE: MARCH 1996

P-5A

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

SURHEAD

WEAPONS PROCUREMENT, NAVY

BA-2 OTHER MISSILES

RAM MISSILE

12EF

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
EF001	GUIDANCE & CONTROL ASSEMBLY FY 1995	HMSC, TUCSON, AZ	SS/FP	NAVSEA	2/95	10/96	240	216.7	YES	NO	
	BLOCK 0 MISSILES FY 1996										
	BLOCK 0 MISSILES BLOCK 1 MISSILES FY 1997										
	BLOCK 0 MISSILES BLOCK 1 MISSILES										
EF002	PROPULSION ROCKET MOTOR MK112/1 W/ ARMING & FIRING DEVICE MK 298/1 FY 1995	HMSC, TUCSON, AZ ATLANTIC RESEARCH COMPETITIVE	SS/FP C/FP C/FP	NAVSEA NAVAIR NAVAIR	7/95 2/96 1/97	9/96 8/97 8/98	240 230 140	15.1 8.0 8.2	YES YES YES	NO NO NO	
	FY 1996										
	FY 1997										
EF005	ORDNANCE PACKAGE TARGET DETECTOR MK 20/0 FY 1995	HMSC, TUCSON, AZ HMSC, TUCSON, AZ HMSC, TUCSON, AZ	'SS/FP SS/FP OPTION	NAVSEA NAVSEA NAVSEA	7/95 1/96 1/97	8/96 7/97 7/98	240 230 140	19.4 10.5 10.7	YES YES YES	NO NO NO	
	FY 1996										
	FY 1997										

REMARKS

DD Form 2446, JUL 87

P-1 SHOPPING LIST
ITEM NO.-10 PAGE NO.3

CLASSIFICATION:

UNCLASSIFIED

049

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING

DATE: MARCH 1996

P-5A

APPROPRIATION/BUDGET ACTIVITY

WEAPONS PROCUREMENT, NAVY

BA-2 OTHER MISSILES

P-1 ITEM NOMENCLATURE

SUBHEAD

RAM MISSILE

12EF

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
EF004	SAFE & ARM MK 13/2 FY 1995 FY 1997	PIQUA COMPETITIVE	C/FP C/FP	NAVAIR NAVAIR	7/95 2/97	8/96 8/98	240 140	2.2 2.4	YES YES	NO NO	
EF006	WARHEAD WDU 17/8 FY 1995 FY 1996 FY 1997	ENSIGN BICKFORD ENSIGN BICKFORD COMPETITIVE	C/FP C/FP C/FP	NAVAIR NAVAIR NAVAIR	1/95 1/96 2/97	1/97 1/97 8/98	240 170 140	1.5 2.4 2.5	YES YES YES	NO NO NO	
EF010	TELEMETER FY 1994 BLOCK 0 TELEMETER FY 1995 FY 1996 BLOCK 0 TELEMETER BLOCK 1 TELEMETER	RAMSY GmbH OTTOBRUNN, GE N/A COMPETITIVE SOLE SOURCE	SS/FP C/FP P.O.	NAVSEA NAVSEA NAWC/CL	1/95 3/96 10/95	1/96 6/97 10/96	45 30 30	36.8 35.7 29.9	YES YES YES	NO NO NO	
EF957	CONTAINERS FY 1996	COMPETITIVE	C/FP	NAVSEA	6/96	8/97	300	2.2	YES	NO	

REMARKS

P-1 SHOPPING LIST
ITEM NO.-10 PAGE NO.4

CLASSIFICATION:

UNCLASSIFIED

DD Form 2446, JUL 87

05C

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

DATE

MARCH 1996

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

WEAPONS PROCUREMENT, NAVY (WPN), BA-2; OTHER MISSILES

AERIAL TARGETS (PEO(CU))

QUANTITY

FY - 1995

FY - 1996

FY - 1997

FY - 1998

FY - 1999

FY - 2000

FY - 2001

COST (IN MILLIONS)

\$119.1

\$66.6

\$73.1

\$72.2

\$80.9

\$76.3

\$79.8

PROGRAM COVERAGE:

The Aerial Targets program provides powered targets, towed targets and necessary Target Auxiliary and Augmentation Systems (TA/AS) equipment for fleet training, and weapons systems test and evaluation. This program is comprised of a series of continuing target production programs.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

In Fiscal Year 1997, major efforts include the procurement of the AQM-37C high altitude supersonic subscale targets and BQM type supersonic subscale targets. TA/AS procurements include target command/control equipment, scoring equipment, location and identification equipment, navigation equipment and electronic countermeasures and active emitter augmentation equipment. The equipment provided from this program supports all Navy air-to-air and surface-to-air training and weapons systems DT/OT testing.

P-1 No. 11

Page 1

FILE NAME: C:\WPN\ EXHP40BK.XLS (MAR 96)

Exhibit P-40

UNCLASSIFIED

053

UNCLASSIFIED

A. APPROPRIATION				B. DATE				
WEAPONS PROCUREMENT, NAVY (WPN)				MARCH 1996				
C. BUDGET ACTIVITY				D. P-1 LINE NOMENCLATURE				
BA-2 OTHER MISSILES				AERIAL TARGETS (J2EM)				
COST CODE	ELEMENT OF COST	IDENT CODE	FISCAL YEAR 1995		FISCAL YEAR 1996		FISCAL YEAR 1997	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
EM010	BQM-34S	A	65	\$34,712	0	\$4,111	0	\$837
EM020	AQM-37C	A	88	\$14,918	70	\$15,226	100	\$19,067
EM030	BQM SUBSONIC SUBSCALE	A	93	\$34,685	100	\$33,034	120	\$39,267
EM100	TOW TARGETS	A	0	\$2,337	0	\$0	0	\$0
EM200	OTHER TARGETS	A	24	\$12,809	0	\$1,201	0	\$0
EM300	TA/AS	A		\$19,600		\$13,055		\$13,976
TOTAL			270	\$119,061	170	\$66,627	220	\$73,147
SPARES (1)								
BQM-34S				\$570		\$7,601		\$695
AQM-37C				\$0		\$0		\$86
BQM SUBSONIC SUBSCALE				\$125		\$100		\$96
TOW TARGETS				\$0		\$0		\$0
OTHER TARGETS				\$405		\$0		\$0
TA/AS				\$156		\$250		\$0
TOTAL SPARES				\$1,256		\$7,951		\$877
TOTAL PROGRAM			270	\$120,317	170	\$74,578	220	\$74,024

FILE NAME: C:\WPN\EXHP22BK.XLS (MAR 96) EXHIBIT P- P-1 # 11 PAGE 2

(1) Initial spares requirements are displayed for information purposes only and are budgeted in Budget Activity 6, Spare and Repair Parts.

UNCLASSIFIED

MARCH 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: BQM-34S MANUFACTURER: TELEDYNE RYAN, SAN DIEGO, CA COST CODE: EM010 FLYAWAY COST (\$000)	FISCAL YEAR			FISCAL YEAR			FISCAL YEAR			FISCAL YEAR		
	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:												
* TARGET	65	\$430	\$27,950				0		\$0	0		\$0
GFM			\$1,881						\$0			\$0
TECHNICAL DATA PACKAGE			\$0						\$0			\$0
INSTALL/MISSION KITS			\$1,537						\$1,208			\$0
TOTAL HARDWARE	65	\$483	\$31,368	0			0		\$1,208	0		\$0
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING			\$0						\$0			\$0
GOVERNMENT IN-HOUSE			\$1,707						\$1,752			\$545
DOCUMENTATION			\$194						\$198			\$73
GOVERNMENT TEST			\$501						\$125			\$0
OTHER			\$0						\$0			\$0
TOTAL RECURRING			\$2,402						\$2,075			\$618
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT			\$0						\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT			\$0						\$0			\$0
TOTAL NONRECURRING			\$0						\$0			\$0
TOTAL FLYAWAY	65	\$520	\$33,770	0			0		\$3,283	0		\$618
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			\$78						\$225			\$0
INSTALL & CHECKOUT			\$0						\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0						\$0			\$0
FLEET TEST EQUIPMENT			\$0						\$0			\$0
TRAINING DEVICES			\$35						\$75			\$0
DOCUMENTATION			\$0						\$0			\$0
ILS			\$829						\$528			\$219
TOTAL GRD EQUIP/FLEET SUP COST			\$942						\$828			\$219
WEAPONS SYSTEM COST	65	\$534	\$34,712	0			0		\$4,111	0		\$837
TARGETS INITIAL SPARES			\$570						\$7,601			\$695
TOTAL PROGRAM COST	65	\$543	\$35,282	0			0		\$11,712	0		\$1,532

FILE NAME: C:\WPN\EM010BK.XLS (MAR 96)

P-1 # 11 Page 3

* The FY95 BQM-34S unit price includes non-recurring engineering associated with ECP-329 (new two-axis microprocessor flight control system).

MARCH 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: AQM-37C MANUFACTURER: BEECH AIRCRAFT, WICHITA, KS COST CODE: EM020 FLYAWAY COST (\$000)	FISCAL YEAR 1995			FISCAL YEAR 1996			FISCAL YEAR 1997		
	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:									
TARGET	88	\$118	\$10,348		\$124	\$8,708	100	126	12,570
GFM-BATTERIES			\$0			\$182			266
* GFM-IRFNA			\$676			\$273			399
INSTALL/MISSION KITS			\$1,488			\$715			1,537
** EXTENDED PERFORMANCE KITS			\$0			\$0		**	1,111
TOTAL HARDWARE	88	\$142	\$12,512	70	\$141	\$9,878	100	\$159	\$15,883
PROCUREMENT SUPPORT (RECURRING):									
CONTRACTOR ENGINEERING			\$0			\$0			0
GOVERNMENT IN-HOUSE			\$1,500			\$2,021			1,435
DOCUMENTATION			\$262			\$424			275
GOVERNMENT TEST			\$120			\$206			475
TOTAL RECURRING			\$1,882			\$2,651			2,185
PROCUREMENT SUPPORT (NONRECURRING):									
*** PRODUCT IMPROVEMENT			\$0		***	\$2,363			0
SPECIAL TOOLING AND TEST EQUIPMENT *			\$0			\$0			0
TOTAL NONRECURRING			\$0			\$2,363			\$0
TOTAL FLYAWAY	88	\$164	\$14,394	70	\$213	\$14,892	100	181	18,068
GROUND EQUIPMENT/FLEET SUPPORT COST:									
GROUND EQUIPMENT			\$0			\$0			0
INSTALL & CHECKOUT			\$0			\$0			0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			0
FLEET TEST EQUIPMENT			\$0			\$0			0
TRAINING DEVICES			\$11			\$29			29
DOCUMENTATION			\$0			\$0			400
ILS			\$513			\$305			570
TOTAL GRD EQUIP/FLEET SUP COST			\$524			\$334			999
WEAPONS SYSTEM COST	88	\$170	\$14,918	70	\$218	\$15,226	100	191	19,067
TARGETS INITIAL SPARES			\$0			\$0			86
TOTAL PROGRAM COST	88	\$170	\$14,918	70	\$218	\$15,226	100	192	19,153

FILE NAME: C:\WPEN\EM020.XLS (MAR 96)

P-1 # 11 Page 4

* Inhibited Red Fuming Nitric Acid. Included in FY95 is the emergent requirement for Dept of Transportation certified IRFNA shipping containers.

** Extended performance kits are required to perform missions at altitudes from 70,000 to 100,000 feet at velocities from Mach 3 to Mach 4.

Approximately 30 kits will be procured in FY97.

*** Avionics upgrade - obsolete components no longer commercially available.

UNCLASSIFIED

MARCH 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: BQM SUBSONIC SUBSCALE		FISCAL YEAR			FISCAL YEAR			FISCAL YEAR		
MANUF: NORTHROP-GRUMMAN/TRA		1995			1996			1997		
COST CODE: EM030 FLYAWAY COST (\$000)		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
HARDWARE:										
TARGET (1)		93	\$306	\$28,502	100	\$279	\$27,930	120	\$278	\$33,336
AIR LAUNCH KITS				\$248			\$218			\$223
INSTALL/MISSION KITS				\$2,383			\$2,634			\$3,485
TOTAL HARDWARE		93	\$335	\$31,133	100	\$308	\$30,782	120	\$309	\$37,044
PROCUREMENT SUPPORT (RECURRING):										
CONTRACTOR ENGINEERING				\$0			\$0			\$0
GOVERNMENT IN-HOUSE				\$1,310			\$1,476			\$1,350
DOCUMENTATION				\$160			\$114			\$164
GOVERNMENT TEST				\$258			\$150			\$54
TOTAL RECURRING				\$1,728			\$1,740			\$1,568
PROCUREMENT SUPPORT (NONRECURRING):										
PRODUCT IMPROVEMENT				\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT				\$0			\$0			\$0
TOTAL NONRECURRING				\$0			\$0			\$0
TOTAL FLYAWAY		93	\$353	\$32,861	100	\$325	\$32,522	120	\$322	\$38,612
GROUND EQUIPMENT/FLEET SUPPORT COST:										
GROUND EQUIPMENT				\$75			\$125			\$0
INSTALL & CHECKOUT				\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT				\$0			\$0			\$0
FLEET TEST EQUIPMENT				\$0			\$0			\$0
TRAINING DEVICES				\$41			\$33			\$34
DOCUMENTATION				\$1,190			\$0			\$0
ILS				\$518			\$354			\$621
TOTAL GRD EQUIP/FLEET SUP COST				\$1,824			\$512			\$655
WEAPONS SYSTEM COST		93	\$373	\$34,685	100	\$330	\$33,034	120	\$327	\$39,267
TARGETS INITIAL SPARES				\$125			\$100			\$96
TOTAL PROGRAM COST		93	\$374	\$34,810	100	\$331	\$33,134	120	\$328	\$39,363

FILE NAME: C:\WPNI\EM030.XLS (MAR 96)

P-1 # 11

Page 5

- (1) The FY-95 procurement is for the BQM-74E targets. The Navy plans to have a BQM Subsonic Subscale type target limited price competition between the BQM-34S and BQM-74E in FY-96 with options for FY-97/98/99.

UNCLASSIFIED

057

UNCLASSIFIED

MARCH 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: TOW TARGETS MANUFACTURER: VARIOUS COST CODE: EM100	FISCAL YEAR			1995			FISCAL YEAR			1996			1997		
	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
FLYAWAY COST (\$000)															
HARDWARE:															
TDU-32 BANNER SERIES	0		\$0		0	\$0			\$0		0	\$0			\$0
TDU-34	0		\$0		0	\$0			\$0		0	\$0			\$0
TA/AS MISSION SETS			\$0			\$0			\$0			\$0			\$0
TOTAL HARDWARE	0		\$0		0	\$0			\$0		0	\$0			\$0
PROCUREMENT SUPPORT (RECURRING):															
CONTRACTOR ENGINEERING			\$0			\$0			\$0			\$0			\$0
GOVERNMENT IN-HOUSE			\$1,469			\$1,469			\$0			\$0			\$0
DOCUMENTATION			\$167			\$167			\$0			\$0			\$0
GOVERNMENT TEST			\$121			\$121			\$0			\$0			\$0
TOTAL RECURRING			\$1,757			\$1,757			\$0			\$0			\$0
PROCUREMENT SUPPORT (NONRECURRING):															
PRODUCT IMPROVEMENT			\$0			\$0			\$0			\$0			\$0
TOOLING			\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT			\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING			\$0			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	0		\$1,757		0	\$1,757			\$0		0	\$0			\$0
GROUND EQUIPMENT/FLEET SUPPORT COST:															
GROUND EQUIPMENT			\$134			\$134			\$0			\$0			\$0
INSTALL & CHECKOUT			\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			\$0			\$0
TOOLING			\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT			\$0			\$0			\$0			\$0			\$0
TRAINING DEVICES			\$29			\$29			\$0			\$0			\$0
DOCUMENTATION			\$0			\$0			\$0			\$0			\$0
ILS			\$417			\$417			\$0			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST			\$580			\$580			\$0			\$0			\$0
WEAPONS SYSTEM COST	0		\$2,337		0	\$2,337			\$0		0	\$0			\$0
TARGETS INITIAL SPARES			\$0			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	0		\$2,337		0	\$2,337			\$0		0	\$0			\$0

Page 6

P-1 #11

FILE NAME: C:\WPNI\EM100BK.XLS (MAR 96)

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

MARCH 1996

TARGET SYSTEM: MANUF: ALLIED-SIGNAL,TETERBORO, NJ COST CODE: EM200 FLYAWAY COST (\$000)	FISCAL YEAR			FISCAL YEAR			FISCAL YEAR			FISCAL YEAR		
	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:												
MQM-8G(EER) VANDAL	24	\$393	\$9,422						\$0			\$0
MQM-8G(EER) ANCILLARY EQUIP			\$2,107						\$0			\$0
TOTAL HARDWARE	24	\$480	\$11,529						\$0			\$0
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING			\$0						\$0			\$0
GOVERNMENT IN-HOUSE			\$854						\$584			\$0
DOCUMENTATION			\$0						\$0			\$0
GOVERNMENT TEST			\$0						\$300			\$0
TOTAL RECURRING			\$854						\$884			\$0
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT			\$0						\$0			\$0
CONTRACTOR ENGINEERING			\$0						\$0			\$0
TOOLING			\$0						\$0			\$0
TEST EQUIPMENT			\$0						\$0			\$0
TOTAL NONRECURRING			\$0						\$0			\$0
TOTAL FLYAWAY	24	\$516	\$12,383						\$884			\$0
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			\$0						\$0			\$0
INSTALL & CHECKOUT			\$0						\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0						\$0			\$0
TOOLING			\$0						\$0			\$0
TEST EQUIPMENT			\$0						\$0			\$0
TRAINING DEVICES			\$0						\$64			\$0
DOCUMENTATION			\$193						\$0			\$0
ILS			\$233						\$253			\$0
TOTAL GRD EQUIP/FLEET SUP COST			\$426						\$317			\$0
WEAPONS SYSTEM COST	24	\$534	\$12,809						\$1,201			\$0
TARGETS INITIAL SPARES			\$405						\$0			\$0
TOTAL PROGRAM COST	24	\$551	\$13,214						\$1,201			\$0

FILE NAME: C:\WPNI\EM200BK.XLS (MAR 96) P-1 # 11 Page 7

MARCH 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: TAVAS MANUFACTURER: VARIOUS COST CODE: EM300 FLYAWAY COST (\$000)	FISCAL YEAR			FISCAL YEAR			FISCAL YEAR			FISCAL YEAR		
	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST
HARDWARE:												
CDM/CONTROL EQUIPMENT			\$2,213			\$1,632			\$2,686			
SCORING EQUIPMENT			\$572			\$813			\$1,540			
LOCATION/ID EQUIP			\$0			\$298			\$603			
ECM/EMITTER EQUIP			\$8,209			\$4,693			\$4,177			
AUGMENT/NAVIGAT EQUIP			\$0			\$305			\$308			
INSTALL/MISSION EQUIP			\$0			\$495			\$508			
MOBILE SEA RANGE			\$2,011			\$270			\$0			
TOTAL HARDWARE			\$13,005			\$8,506			\$9,822			
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING			\$0			\$0			\$0			
GOVERNMENT IN-HOUSE			\$3,697			\$3,034			\$3,078			
DOCUMENTATION			\$0			\$12			\$0			
GOVERNMENT TEST			\$0			\$164			\$0			
TOTAL RECURRING			\$3,697			\$3,210			\$3,078			
PROCUREMENT SUPPORT (NONRECURRING):												
* PRODUCT IMPROVEMENT			\$1,300			\$0			\$0			
TOOLING			\$0			\$0			\$0			
TEST EQUIPMENT			\$0			\$0			\$0			
TOTAL NONRECURRING			\$1,300			\$0			\$0			
TOTAL FLYAWAY			\$18,002			\$11,716			\$12,900			
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			\$143			\$345			\$0			
INSTALL & CHECKOUT			\$0			\$0			\$0			
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			
TOOLING			\$0			\$0			\$0			
TEST EQUIPMENT			\$0			\$0			\$0			
TRAINING DEVICES			\$56			\$68			\$69			
DOCUMENTATION			\$0			\$0			\$0			
ILS			\$1,399			\$926			\$1,007			
TOTAL GRD EQUIP/FLEET SUP COST			\$1,598			\$1,339			\$1,076			
WEAPONS SYSTEM COST			\$19,600			\$13,055			\$13,976			
TARGETS INITIAL SPARES			\$156			\$250			\$0			
TOTAL PROGRAM COST			\$19,756			\$13,305			\$13,976			

FILE NAME: C:\WPEN\EN300.XLS (MAR 96)

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

[illegible]

PAGE NO.	Exhibit P-5A Procurement History & Planning
	9

- (1) The BQM-34S unit price includes non-recurring engineering associated with ECP-329 (new two-axis microprocessor flight control system).
- (2) The Navy plans to have a BQM Subsonic Subscale type target limited price competition for FY-96 with options for FY-97/98/99.

081

[illegible]

P1 SHOPPING LIST		PAGE NO
ITEM NO		
11		11

PAGE 2 OF 2 PAGES
UNCLASSIFIED

EXHIBIT P-21A

063

UNCLASSIFIED

REQUIREMENT STUDY

MARCH 1996

064

APPROPRIATION/BUDGET ACTIVITY:

WPN/BA-2

P-1 ITEM NOMENCLATURE: AQM-37C (AERIAL TARGETS)

ASSETS

On Hand as of: 2/1/96

Due-In with all Prior Years' Funds:

Due-In w/FY 95 Funds:

TOTAL ASSETS:

103
61
88
252

USAGE (Planned & Projectedthrough Funded Delivery Period (FDP))

FY 96 and Prior:

FY 97:

FY 98:

FY 99:

FY 00:

FY 01:

TOTAL USAGE (40 MONTHS)

FY 96 FDP	FY 97 FDP
82	0
110	0
73	37
0	73
0	0
0	0
265	110

PROCUREMENT LEADTIME:

MONTHS

21

NET ASSETS:

END OF: FY 96 FDP	FY 97 FDP
-13	-123

ACTUAL TRAINING EXPENDITURE

FY 96: (Through 1/31/96)

FY 95:

FY 94:

FY 93:

FY 92:

13
69
92
67
46

ACTUAL OTHER THAN TRAINING EXPENDITURE

FY 96: (Through 1/31/96)

FY 95:

FY 94:

FY 93:

FY 92:

15
27
22
34
33

INVENTORY OBJECTIVE

Number of Combat Loads
Assets Required for Combat Loads
Combat Expenditures
War Reserve Requirement
Annual Training
Annual Testing
Maintenance Pipeline
Other - Peacetime Pipeline
Other - WSPD of JUL 94
Other

FY 96 FDP	FY 97 FDP
140	140
140	140

TOTAL REQUIREMENT

APPROVED ACQUISITION OBJECTIVE

140
140

PROCUREMENT REQUIREMENT

Total FY 96 Requirement
Less: Net Assets end of FY 96 FDP
Required FY 96 Procurement
Planned FY 96 Procurement
Revised Net Assets end of FY 96 FDP

140
-13
153
70
57

Total FY 97 Requirement
Less: Net Assets end of FY 97 FDP
Less: FY 96 Planned Procurement
Required FY 97 Procurement
Planned FY 97 Procurement
Revised Net Assets end of FY 97 FDP

140
-123
70
193
100
47

P-1 SHOPPING LIST

ITEM NO. PAGE NO.

11 12

EXHIBIT P-20 REQUIREMENTS STUDY

FILE: C:\WPN\1P-20A.XLS (MAR 96)

UNCLASSIFIED

UNCLASSIFIED

REQUIREMENT STUDY

MARCH 1996

APPROPRIATION/BUDGET ACTIVITY:

WPN/BA-2

P-1 ITEM NOMENCLATURE: BQM TYPE (AERIAL TARGETS)

ASSETS

On Hand as of: 2/1/96
 Due-In with all Prior Years' Funds:
 Due-in w/FY 95 Funds:
 TOTAL ASSETS:

244
 87
 93
 424

USAGE (Planned & Projected
 through Funded Delivery Period (FDP))

FY 96 and Prior:
 FY 97:
 FY 98:
 FY 99:
 FY 00:
 FY 01:
 TOTAL USAGE (41 MONTHS)

FY 96 FDP
 123
 155
 116
 0
 0
 0
 394

FY 97 FDP
 0
 0
 39
 116
 0
 0
 155

PROCUREMENT LEADTIME:

22

MONTHS

NET ASSETS:

END OF: FY 96 FDP

FY 97 FDP

30

-125

ACTUAL TRAINING EXPENDITURE

FY 96: (Through 1/31/96)

27

FY 95:

124

FY 94:

130

FY 93:

127

FY 92:

133

ACTUAL OTHER THAN TRAINING EXPENDITURE

FY 96: (Through 1/31/96)

5

FY 95:

31

FY 94:

23

FY 93:

34

FY 92:

27

INVENTORY OBJECTIVE

Number of Combat Loads
 Assets Required for Combat Loads
 Combat Expenditures
 War Reserve Requirement
 Annual Training
 Annual Testing
 Maintenance Pipeline
 Other - Peacetime Pipeline
 Other - WSPD of OCT 94
 Other

FY 96 FDP

FY 97 FDP

240
 240
 240

TOTAL REQUIREMENT

240

240

APPROVED ACQUISITION OBJECTIVE

240

240

PROCUREMENT REQUIREMENT

Total FY 96 Requirement

240

Less: Net Assets end of FY 96 FDP

30

Required FY 96 Procurement

210

Planned FY 96 Procurement

100

Revised Net Assets end of FY 96 FDP

130

Total FY 97 Requirement

240

Less: Net Assets end of FY 97 FDP

-125

Less: FY 96 Planned Procurement

100

Required FY 97 Procurement

265

Planned FY 97 Procurement

120

Revised Net Assets end of FY 97 FDP

95

EXHIBIT P-20 REQUIREMENTS STUDY
 FILE: C:\WPN\ P-20XLS (MAR 96)

P-1 SHOPPING LIST
 ITEM NO. PAGE NO.
 11 13

UNCLASSIFIED

065

066

MARCH 1996

THIS PAGE LEFT INTENTIONALLY BLANK

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEETDATE
MARCH 1996

APPROPRIATION/BUDGET ACTIVITY

WEAPONS PROCUREMENT, NAVY (WPN), BA-2; OTHER MISSILES

P-1 ITEM NOMENCLATURE

DRONES AND DECOYS

	FY - 1995	FY - 1996	FY - 1997	FY - 1998	FY - 1999	FY - 2000	FY - 2001
QUANTITY							
COST (IN MILLIONS)	\$7.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

PROGRAM COVERAGE:

All funding for Drones and Decoys since FY 1986 has been used for continued procurements of ADM-141 Tactical Air Launched Decoy (TALD) units, which are non-powered, glide trajectory driven vehicles. The ADM-141 TALD is an expendable of similar size to a 500 pound general purpose bomb, and is carried similarly. After launch from strike aircraft, the ADM-141 TALD uses radar signature augmentation and preprogrammed flight profiles to simulate manned aircraft. Its mission is to deceive and saturate hostile radar controlled air defenses, thus enhancing strike aircraft survivability. Currently, the A-6, F/A-18, F-14 and S-3 are fully qualified to deploy the ADM-141 TALD in both land based and CV operations. Additionally, an AV-8B/TALD capability is planned.

The FY 1995 funding will procure an Improved TALD (ITALD), ADM-141C. The major improvement to this decoy is an engine that will give the decoy a much longer stand-off range. The FY 1995 funds will procure approximately 65 ADM-141C ITALDs.

DD Form 2453, JUN 86

FILE NAME: C:\WPN\ITD-P40.XLS (MAR 96)

P-1 SHOPPING LIST PAGE NO

ITEM NO. 1

12

EXHIBIT P-40

UNCLASSIFIED

067

MARCH 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

SYSTEM: ITALD MANUFACTURER: IMI LTD, TEL AVIV, IS (TALD) COST CODE: DJ010 FLYAWAY COST (\$000)	FISCAL YEAR			1995			FISCAL YEAR			1996			1997		
	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:															
ITALD	65	\$100	\$6,500				0		\$0	0		\$0			\$0
CONTAINERS		\$2	\$66				0		\$0	0		\$0			\$0
TOTAL HARDWARE	65	\$101	\$6,566				0		\$0	0		\$0			\$0
PROCUREMENT SUPPORT (RECURRING):															
CONTRACTOR ENGINEERING			\$0						\$0			\$0			\$0
GOVERNMENT IN-HOUSE			\$339						\$0			\$0			\$0
DOCUMENTATION			\$0						\$0			\$0			\$0
GOVERNMENT TESTING			\$385						\$0			\$0			\$0
OTHER			\$0						\$0			\$0			\$0
TOTAL RECURRING			\$724						\$0			\$0			\$0
PROCUREMENT SUPPORT (NONRECURRING):															
PRODUCT IMPROVEMENT			\$0						\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT			\$0						\$0			\$0			\$0
TOTAL NONRECURRING			\$0						\$0			\$0			\$0
TOTAL FLYAWAY	65	\$112	\$7,290				0		\$0	0		\$0			\$0
GROUND EQUIPMENT/FLEET SUPPORT COST:															
GROUND EQUIPMENT			\$0						\$0			\$0			\$0
INSTALL & CHECKOUT			\$0						\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0						\$0			\$0			\$0
FLEET TEST EQUIPMENT			\$0						\$0			\$0			\$0
TRAINING DEVICES			\$0						\$0			\$0			\$0
DOCUMENTATION			\$0						\$0			\$0			\$0
ILS			\$139						\$0			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST			\$139						\$0			\$0			\$0
WEAPONS SYSTEM COST	65	\$114	\$7,429				0		\$0	0		\$0			\$0
INITIAL SPARES			\$0						\$0			\$0			\$0
TOTAL PROGRAM COST	65	\$114	\$7,429				0		\$0	0		\$0			\$0

FILE NAME: CAWPNIITDP22.XLS (MAR 96)

P-I NO 12

PAGE NO

2

UNCLASSIFIED

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE MARCH 1996[illegible]

FILE NAME: C:\WPN\UTDP22A.XLS P-1 SHOPPING LIST

(MAR 96)

P-1 SHOPPING LIST

ITEM NO.

12

PAGE NO

3

12

Exhibit P-5A Procurement and History Planning

NOTES: (1) The acquisition strategy was changed from a limited competition to a sole source procurement since one of the two qualified sources has chosen to get out of defense business in order to concentrate on commercial business only.

(2) A letter contract will be awarded June 1996 with definitization October 1996.

UNCLASSIFIED

065

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET						DATE: MAR 1995	
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA: 2 OTHER MISSILES		P-1 ITEM NOMENCLATURE OTHER MISSILE SUPPORT (12FD)					
	1995	1996	1997	1998	1999	2000	2001
QUANTITY							
COST (In Millions)	\$8.8	\$23.3	\$18.0	\$20.0	\$20.6	\$23.6	\$24.3
<p>The Vertical Launching System (VLS) is a missile launching system for surface combatants, designed to launch Standard Missile, TOMAHAWK and Vertical Launch ASROC (VLA) weapons. The VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapons systems. Present requirements are to provide two 61 cell launchers for 22 TICONDEROGA (CG-47) Class Cruisers beginning with CG-52, one 61 cell launcher for 24 SPRUANCE (DD-963) Class destroyers and one 61 cell and one 29 cell launcher for 57 ARLEIGH BURKE (DDG-51) Class destroyers. A 61 cell launcher consists of eight VLS modules and 61 canisters. Canisters are used as a storage/shipping container for missiles ashore and as the magazine and firing tube aboard ship. In order to support the operating forces, it is necessary to have sufficient encanisterized missiles on hand to fill the logistic pipeline associated with the Combat Logistics Force (CLF) transportation times and mobilization considerations. To accomplish this one canister is required for every VLS missile variant that is procured. In addition, a small percentage of canisters are procured to cover those canisters that are lost, damaged or destroyed. The major portion of the WPN funds is for the procurement of VLS canisters. A small amount of funds is required to provide VLS unique equipment to the weapons stations and to provide ILS for canisters procured with WPN funds. Prior to FY-96, canisters were also funded by SCN and OPN Appropriations.</p>							

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

ITEM NO.- 13 PAGE NO.- 1

071

UNCLASSIFIED

CLASSIFICATION:

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5)

DATE:

MAR

1996

Weapon System
Cost Elements

P-1 ITEM NOMENCLATURE/SUBHEAD

OTHER MISSILE SUPPORT (12FD)

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	1995		1996		1997	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	<u>VERTICAL LAUNCH SYSTEM</u>							
FD005	TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)		70	2,989	117	4,996	51	3,086
FD006	TYPE II CANISTERS TOMAHAWK (MK-14) SM-2 BLK IV (MK-21)		12	689	50 68	2,870 6,725	48	6,782
FD009	CANISTER EQUIPMENT			628		700		600
FD970	ILS SUPPORT			3,931		5,858		6,361
FD980	INITIAL TRAINING SUPPORT			542		2,152		1,215
	TOTAL			8,779		23,301		18,044

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

ITEM NO. 13 PAGE NO. 2

CLASSIFICATION:

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)										DATE	MAR 1996
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE				SUBHEAD				12FD	
WEAPONS PROCUREMENT, NAVY		OTHER MISSILE SUPPORT				SPEC		SPEC		IF YES WHEN AVAILABLE	
BA-2 OTHER MISSILES		P-1 SHOPPING LIST				UNIT COST (\$000)		SPEC		SPEC	
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPEC	SPEC	IF YES WHEN AVAILABLE
FD005	TYPE I CANISTERS										
	SM-2 MR BLK III/IIIA/IIIB (MK-13)										
	FY 95	United Defense FMC/BM Minneapolis	C/FP OPT	NAVSEA	07/95	06/97	70	\$42.7	YES	NO	
	FY 96	United Defense FMC/BM Minneapolis	C/FP OPT	NAVSEA	03/96	01/98	117	\$42.7	YES	NO	
	FY 97	United Defense FMC/BM Minneapolis	SS	NAVSEA	03/97	01/99	51	\$60.5	YES	NO	
FD006	TYPE II CANISTERS										
	TOMAHAWK (MK-14)										
	FY 95	United Defense FMC/BM Minneapolis	C/FP OPT	NAVSEA	07/95	06/97	12	\$57.4	YES	NO	
	FY 96	United Defense FMC/BM Minneapolis	C/FP OPT	NAVSEA	03/96	01/98	50	\$57.4	YES	NO	
	SM-2 BLK IV (MK-21)										
	FY 96	United Defense FMC/BM Minneapolis	C/FP	NAVSEA	03/96	01/98	68	\$98.9	YES	NO	
	FY 97	United Defense FMC/BM Minneapolis	SS	NAVSEA	03/97	01/99	48	\$141.3	YES	NO	
REMARKS											

DD Form 2446, JUL 87

P-1 SHOPPING LIST
ITEM NO.-13 PAGE NO.3

CLASSIFICATION:

UNCLASSIFIED

073

MAR 1996

APPENDIX A FISCAL YEAR 1996-1997 BUDGET PRODUCTION SCHEDULE

OTHER MISSILE SUPPORT

MAR 1996

[illegible]**TOTAL**[illegible]

NAVJAG FORM 7110A (REVISED 11/77)

P.1 SHOPPING LIST

ITEM NO. 13 PAGE NO. 4

UNCLASSIFIED

THIS PAGE LEFT INTENTIONALLY BLANK

BUDGET ITEM JUSTIFICATION SHEET									
APPROPRIATION/BUDGET ACTIVITY:		P-1 ITEM NOMENCLATURE:							
WEAPONS PROCUREMENT, NAVY 2/OTHER MISSILES		TOMAHAWK MODS (J2DN) (PEO(CU)) (BLI: 230100)							
QUANTITY		FY95	FY96	FY97	FY98	FY99	FY00	FY01	
		-	-	-	-	-	-	-	
COST (In Millions)		\$17.3	\$47.9	\$0.0	\$4.0	\$11.4	\$4.1	\$0.0	

Funds are required to procure modifications for the Tomahawk Cruise Missiles. The modifications will be installed on a "turnkey" basis during the normal recertification cycle of each missile at contractor depot facilities. As a result, installation costs are not priced separately from the hardware costs in this line. A detailed funding profile for these modification programs is provided below:

	(\$ in Millions)					
	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>
Avionics Upgrade	14.6	0.0	0.0	0.0	0.0	0.0
Pneumatic Kits	2.7	0.0	0.0	0.0	0.0	0.0
Composite Capsule Launch	0.0	0.0	0.0	4.0	8.1	4.1
BLU-97 Insensitive Munitions	0.0	0.0	0.0	0.0	3.3	0.0
Tomahawk Remanufacture	0.0	47.9	0.0	0.0	0.0	0.0

P-1 Item #14 Page #2

INDIVIDUAL MODIFICATION														
BUDGET ACTIVITY: 2/OTHER MISSILES		P-1 ITEM NOMENCLATURE: TOMAHAWK MODIFICATIONS (J2DN) (PEO(CU)) (BLI: 230100)												
MODIFICATION TITLE: PNEUMATIC KITS														
MODELS OF SYSTEM EFFECTED: RUGM-109														
DESCRIPTION/JUSTIFICATION														
Pneumatic improvements in support of Technical Change -039 (Shroud Separation System), Technical Change -75 (Series Office), Technical Change -045 (Resistor Check Valve), Technical Change -101 (Helium Bottles), Technical Change -105 (RGM Access Doors) and DSMAC IIA, Rev E (Camera).														
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Development complete; in production.														
FINANCIAL PLAN														
RDT&E														
PROCUREMENT														
Kit Quantity														
Installation Kits (\$000)														
Installation Kit Nonrecurring														
Installed Equipment														
Installed Equipment Nonrecurring														
Engineering Change Orders														
Data														
Training Equipment														
Support Equipment														
Other														
Interim Contractor Support														
Installation of Hardware														
FY95 & Prior Equipment (kits)														
FY96 Equipment (kits)														
FY97 Equipment (kits)														
FY98 Equipment (kits)														
FY99 Equipment (kits)														
FY00 Equipment (kits)														
FY01 Equipment (kits)														
Total Installation Cost														
Total Procurement Cost														
Method of Implementation: Contractor Facilities (Depot)														
Contract Dates:														
Delivery Dates														
Installation Schedule														
Input														
FY95 & Prior														
FY96														
FY97														
FY98														
FY99														
FY00														
FY01														
Output														
FY95 & Prior														
FY96														
FY97														
FY98														
FY99														
FY00														
FY01														

NOTE: 'Pneumatic Kits' is a generic term used to broadly indicate the multiple efforts, at varying cost, identified in DESCRIPTION/JUSTIFICATION, above.

[illegible]

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION/BUDGET ACTIVITY										MARCH 1996
WEAPONS PROCUREMENT NAVY/BA-2 OTHER MISSILES										
P-1 ITEM NOMENCLATURE										
SPARROW MODIFICATIONS										
QUANTITY		FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001		
COST	\$	12.6	\$ 2.9	\$ 2.5	\$ 26.0	\$ 65.5	\$ 74.3	\$ 73.7		
	(in millions)									

The FY95-FY01 Sparrow modification program provides the U.S. Navy with upgraded air-to-air (AIM-7) and surface-to-air (RIM-7) missiles capable of intercepting extremely low flying antiship missiles. Hardware buys provide configuration upgrades to the 7M missiles and are performed during retrofit.

The Evolved Seasparrow Missile (ESSM) Program is introduced in FY 1997. ESSM will provide an evolved kinematically improved aft-end missile section for mating, as an all up round, with the modified RIM-7P forebody guidance and warhead section. The ESSM improvement will provide the capability to counter maneuvering anti-ship missiles, expand battle space and increase system firepower. The ESSM is designed for "quad pack" in the MK41 Vertical Launching System and to be compatible with MK29 trainable launchers for employment in AEGIS, NSSMS and SSDS configured ships.

RDT&E program elements for MHIP are 0603609N, Project Unit U1821 and 0604366N, Project U0439.
RDT&E program element for ESSM is 0604755N, Project Unit U0173.

	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001
7P	1000	801	0	0	0	0	0
MHIP	11566	2102	0	9263	27230	27156	24933
ESSM	0	0	2530	16701	38292	47145	48722

EXHIBIT P-40

P-1 SHOPPING LIST
ITEM NO. 15 PAGE NO. 1

DD Form 2454, JUN 86

UNCLASSIFIED

087

UNCLASSIFIED

082

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)			DATE		MARCH 1996			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
WEAPONS PROCUREMENT NAVY/BA-2 OTHER MISSILES			SPARROW MODIFICATIONS					
System/Modification	FY 1995 & PRIOR	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	TOTAL
AIM/RIM-7R (MHP)	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.6
TOTAL	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.6

UNCLASSIFIED

EVOLVED SEASPARROW MISSILE (ESSM)

MODELS OF SYSTEM AFFECTED:
MODELS OF WEAPONS SYSTEMS
COMPATIBLE WITH:

RIM-7P
MK41 Vertical Launching System (VLS) Quad Pack on U.S. AEGIS and LPD 17 Ships
NATO SEASPARROW Surface Missile System (NSSMS) on U.S. Ships
Ship Defense System (SSDS) Configured Ships

DESCRIPTION/JUSTIFICATION:

ESSM will provide an upgraded surface to air missile capable of countering maneuvering anti-ship missiles, expand battle space and increase system firepower. Assumptions used in pricing:
1) Support ESSM capability on 20 DDG Frigate, 12 LPD, 12 CVN and 7 LHD.
2) Assumes AIM-7P Guidance Sections available from current fleet inventory for all missiles.

DEVELOPMENT STATUS/MAJOR
DEVELOPMENT MILESTONES:

- Concept Definition Phase (FY91-94)
- Milestone Documentation/COEA
- MS IV Decision
- Transition to EMD
- ESSM EMD Award
- MK41 VLS Quad Pack EMD Contract Award
- NSSMS System/MK91 Contract Award

FINANCIAL PLAN: (\$ 000)

	FY97	FY98	FY99	FY00	FY01	TO COMPLETE	TOTAL
	Qty	Qty	Qty	Qty	Qty	Qty	Qty
PROCUREMENT	0	0	35	110	110	4361	4,616
Pre-Production Engineering							
Missile Hdw/Integration	1,512	0	0	0	0	0	1,512
Production Tools/Test Equip							
Gov't In-House Sys Engr/Test	1,018	11,141	23,072	35,700	36,771	1,658,874	1,754,417
Fleet/ILS Support		3,397	6,539	0	0	2,146	19,828
Support Equipment		2,163	8,420	8,443	8,697	503,595	531,570
			1,421	1,589	1,854	85,078	98,952
			840	1,403	1,400	120,847	126,653
TOTAL PROCUREMENT COST	0	16,701	38,292	47,145	48,722	2,380,540	2,533,930
Installation	0	0	0	0	0	0	0
TOTAL COST	0	16,701	38,292	47,145	48,722	2,380,540	2,533,930

METHOD OF IMPLEMENTATION:

Assembly of All Up Round (AUR), including test, will occur at the contractor facility.

CONTRACT DATE: FY97: N/A

PRODUCTION DELIVER DATE: FY97: N/A

PRODUCTION DELIVERIES:

LRIP FY99	FY00	FY01	TC	TOTAL
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
	5 10	10 10		35
FRP FY00		25 25	60	110
FRP FY01			110	110
TC			4361	4361

ADMINISTRATIVE LEADTIME: 6 MONTHS.

PRODUCTION LEADTIME: 18 MONTHS.

EXHIBIT P-3A

UNCLASSIFIED

UNCLASSIFIED

FY 1997 PRESIDENTS BUDGET SUBMISSION
MODIFICATION OF WEAPON SYSTEM

MARCH 1996

08

MODIFICATION TITLE: RIM-7P Low Altitude Fuse Retrofit

MODELS OF SYSTEM AFFECTED: RIM-7M

DESCRIPTION/JUSTIFICATION: Retrofit provides U.S. forces with an upgraded surface-to-air missile capable of intercepting extremely low flying antiship missiles.

DEVELOPMENT STATUS/MAJOR
DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ 000)

	FY95/Prior	FY96	FY97	FY98	FY99	FY00	FY01	TO COMPLETE	TOTAL
	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty
PROUREMENT	2,128	69,685	0	0	0	0	0	0	69,685
Installation Kits		2,000	0	0	0	0	0	0	2,000
Gov't In-House Sys Engr/Test		53,727	801	0	0	0	0	0	54,528
Training Equipment		6,521	0	0	0	0	0	0	6,521
ILS/Support Equipment		23,870	0	0	0	0	0	0	23,870
Installation of Hardware		6,662	0	0	0	0	0	0	6,662
FY 95 & Prior (896 Kits)		6,662	0	0	0	0	0	0	6,662
TOTAL INSTALLATION COST									
	2,128	162,465	0	801	0	0	0	0	163,266

METHOD OF IMPLEMENTATION:

Contractor Facilities

FY96: N/A

FY97: N/A

FY98: N/A

FY99: N/A

FY00: N/A

FY01: N/A

FY02: N/A

FY03: N/A

FY04: N/A

FY05: N/A

FY06: N/A

FY07: N/A

FY08: N/A

FY09: N/A

FY10: N/A

FY11: N/A

FY12: N/A

FY13: N/A

FY14: N/A

FY15: N/A

FY16: N/A

FY17: N/A

FY18: N/A

FY19: N/A

FY20: N/A

FY21: N/A

FY22: N/A

FY23: N/A

FY24: N/A

FY25: N/A

FY26: N/A

FY27: N/A

FY28: N/A

FY29: N/A

FY30: N/A

FY31: N/A

FY32: N/A

FY33: N/A

FY34: N/A

FY35: N/A

FY36: N/A

FY37: N/A

FY38: N/A

FY39: N/A

FY40: N/A

FY41: N/A

FY42: N/A

FY43: N/A

FY44: N/A

FY45: N/A

FY46: N/A

FY47: N/A

FY48: N/A

FY49: N/A

FY50: N/A

FY51: N/A

FY52: N/A

FY53: N/A

FY54: N/A

FY55: N/A

FY56: N/A

FY57: N/A

FY58: N/A

FY59: N/A

FY60: N/A

FY61: N/A

FY62: N/A

FY63: N/A

FY64: N/A

FY65: N/A

FY66: N/A

FY67: N/A

FY68: N/A

FY69: N/A

FY70: N/A

FY71: N/A

FY72: N/A

FY73: N/A

FY74: N/A

FY75: N/A

FY76: N/A

FY77: N/A

FY78: N/A

FY79: N/A

FY80: N/A

FY81: N/A

FY82: N/A

FY83: N/A

FY84: N/A

FY85: N/A

FY86: N/A

FY87: N/A

FY88: N/A

FY89: N/A

FY90: N/A

FY91: N/A

FY92: N/A

FY93: N/A

FY94: N/A

FY95: N/A

FY96: N/A

FY97: N/A

FY98: N/A

FY99: N/A

FY00: N/A

FY01: N/A

FY02: N/A

FY03: N/A

FY04: N/A

FY05: N/A

FY06: N/A

FY07: N/A

FY08: N/A

FY09: N/A

FY10: N/A

FY11: N/A

FY12: N/A

FY13: N/A

FY14: N/A

FY15: N/A

FY16: N/A

FY17: N/A

FY18: N/A

FY19: N/A

FY20: N/A

FY21: N/A

FY22: N/A

FY23: N/A

FY24: N/A

FY25: N/A

FY26: N/A

FY27: N/A

FY28: N/A

FY29: N/A

FY30: N/A

FY31: N/A

FY32: N/A

FY33: N/A

FY34: N/A

FY35: N/A

FY36: N/A

FY37: N/A

FY38: N/A

FY39: N/A

FY40: N/A

FY41: N/A

FY42: N/A

FY43: N/A

FY44: N/A

FY45: N/A

FY46: N/A

FY47: N/A

FY48: N/A

FY49: N/A

FY50: N/A

FY51: N/A

FY52: N/A

FY53: N/A

FY54: N/A

FY55: N/A

FY56: N/A

FY57: N/A

FY58: N/A

FY59: N/A

FY60: N/A

FY61: N/A

FY62: N/A

FY63: N/A

FY64: N/A

FY65: N/A

FY66: N/A

FY67: N/A

FY68: N/A

FY69: N/A

FY70: N/A

FY71: N/A

FY72: N/A

FY73: N/A

FY74: N/A

FY75: N/A

FY76: N/A

FY77: N/A

FY78: N/A

FY79: N/A

FY80: N/A

FY81: N/A

FY82: N/A

FY83: N/A

FY84: N/A

FY85: N/A

FY86: N/A

FY87: N/A

FY88: N/A

FY89: N/A

FY90: N/A

FY91: N/A

FY92: N/A

FY93: N/A

FY94: N/A

FY95: N/A

FY96: N/A

FY97: N/A

FY98: N/A

FY99: N/A

FY00: N/A

FY01: N/A

FY02: N/A

FY03: N/A

FY04: N/A

FY05: N/A

FY06: N/A

FY07: N/A

FY08: N/A

FY09: N/A

FY10: N/A

FY11: N/A

FY12: N/A

FY13: N/A

FY14: N/A

FY15: N/A

FY16: N/A

FY17: N/A

FY18: N/A

FY19: N/A

FY20: N/A

FY21: N/A

FY22: N/A

FY23: N/A

FY24: N/A

FY25: N/A

FY26: N/A

FY27: N/A

FY28: N/A

FY29: N/A

FY30: N/A

FY31: N/A

FY32: N/A

FY33: N/A

FY34: N/A

FY35: N/A

FY36: N/A

FY37: N/A

FY38: N/A

FY39: N/A

FY40: N/A

FY41: N/A

FY42: N/A

FY43: N/A

FY44: N/A

FY45: N/A

FY46: N/A

FY47: N/A

FY48: N/A

FY49: N/A

FY50: N/A

FY51: N/A

FY52: N/A

FY53: N/A

FY54: N/A

FY55: N/A

FY56: N/A

FY57: N/A

FY58: N/A

FY59: N/A

FY60: N/A

FY61: N/A

FY62: N/A

FY63: N/A

FY64: N/A

FY65: N/A

FY66: N/A

FY67: N/A

FY68: N/A

FY69: N/A

FY70: N/A

FY71: N/A

FY72: N/A

FY73: N/A

FY74: N/A

FY75: N/A

FY76: N/A

FY77: N/A

FY78: N/A

FY79: N/A

FY80: N/A

FY81: N/A

FY82: N/A

FY83: N/A

FY84: N/A

FY85: N/A

FY86: N/A

FY87: N/A

FY88: N/A

FY89: N/A

FY90: N/A

FY91: N/A

FY92: N/A

FY93: N/A

FY94: N/A

FY95: N/A

FY96: N/A

FY97: N/A

FY98: N/A

FY99: N/A

FY00: N/A

FY01: N/A

FY02: N/A

UNCLASSIFIED

FY 1987 PRESIDENTS BUDGET SUBMISSION
MODIFICATION OF WEAPON SYSTEM

MARCH 1988

MODIFICATION TITLE: AIM/RIM-7R MISSILE HOMING IMPROVEMENT PROGRAM

MODELS OF SYSTEM AFFECTED: AIM/RIM-7MIP

DESCRIPTION/JUSTIFICATION: Retrofit provides U.S. forces with an upgraded air-to-air and surface-to-air missile capable of intercepting low flying antiship missiles in the presence of enhanced ECM. The MHP provides a significant improvement to AIM/RIM-7M seeker capabilities. The low altitude fuze (7P) capability is inherent in the MHP 7R upgrade. This is an evolutionary program which utilizes the 7P as an interim change.

DEVELOPMENT STATUS/MAJOR

DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ 000)

	FY95/Prior	FY96	FY97	FY98	FY99	FY00	FY01	To Complete	TOTAL
	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty
PROCUREMENT	66	12,100	0	0	0	0	190	20,537	1,800
Installation Kits	14,598	321	0	0	0	0	0	0	14,919
Gov't Sys Eng/Test	7,759	1,781	0	2,223	3,831	3,651	3,485	22,184	44,914
Training Equipment	280	0	0	20	20	20	20	80	440
ILS/Support Equipment	0	0	0	440	275	2,105	589	1,064	4,473
Installation of Hardware									
FY95 & Prior (66 K/its)				24	48	33	66		
FY 98 (33 K/its)									
FY99 (74 K/its)									
TOTAL INSTALLATION COST	0	0	0	24	48	33	66	1,559	3,118
TOTAL PROCUREMENT COST	66	34,737	0	57	9,262	223	27,230	2,690	134,910
TOTAL									3,600

TOTAL PROCUREMENT COST 66 34,737 0 2,102 0 0 57 9,262 223 27,230 223 27,156 341 24,933 2,690 134,910 3,600 260,330

METHOD OF IMPLEMENTATION:

CONTRACTOR FACILITIES

ADMINISTRATIVE LEADTIME: 6 MONTHS.

PRODUCTION LEADTIME: 21 MONTHS.

CONTRACT DATE:

FY84: Jun 96

FY95/97: Jun 97

FY98: Jun 98

PRODUCTION DELIVER DATE:

FY94: Mar 98

FY95/97: Jun 99

FY98: Mar 00

INSTALLATION SCHEDULE

	FY96	FY97	FY98	FY99	FY00	FY01	IC	TOTAL
	1	2	3	4	1	2	3	4
INPUT FY94 (33 K/its)								
INPUT FY95 (33 K/its)								
INPUT FY98 (33 K/its)								
INPUT FY99 (190 K/its)								
TO COMPLETE								
OUTPUT FY94 (33 K/its)								
OUTPUT FY95 (33 K/its)								
OUTPUT FY98 (33 K/its)								
OUTPUT FY99 (190 K/its)								
TO COMPLETE								

* Contract awards planned for FY96 and FY97 using FY94 and FY95 funding respectively (33 K/its in each year).

EXHIBIT F-3A

P-1 SHOPPING LIST
ITEM NO. 16 PAGE NO. 5

UNCLASSIFIED

085

THIS PAGE LEFT INTENTIONALLY BLANK

BUDGET ITEM JUSTIFICATION SHEET

BUDGET ITEM JUSTIFICATION SHEET							DATE
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT NAVY/BA-2 OTHER MISSILES				P-1 ITEM NOMENCLATURE AIM-9 SIDEWINDER MODIFICATION, PEO(T)			
	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
QUANTITY	0	0	0	0	0	0	0
COST (\$ M)	\$3.5	\$16.5	\$1.3	\$1.3	\$0.0	\$0.0	\$0.0
<p>The current AIM-9M Sidewinder does not meet the Infra-Red Counter Measure threat environment. This modification program provides the technology for an upgrade to the AIM-9M inventory. The Guidance and Control section of the AIM-9M missile will be modified at a government depot and/or contractor facilities. The AIM-9M-8/9 modification program improves the robustness of Counter-Counter Measure without changing any basic AIM-9M characteristics.</p>							
AIM-9M-8/9	FY 1995 \$3.5	FY 1996 \$16.5	FY 1997 \$1.3	FY 1998 \$1.3	FY 1999 \$0.0	FY 2000 \$0.0	FY 2001 \$0.0

MODIFICATION INSTALLATION SUMMARY

UNCLASSIFIED

(TOA, Dollars in Millions)

System/Modification

FY95

FY96

FY97

FY98

FY99

FY00

FY01

SIDEWINDER MODS

\$0.8

\$0.6

\$1.3

\$1.3

\$0

\$0

\$0

UNCLASSIFIED

Exhibit P-3N Modification Installation Summary

UNCLASSIFIED

FY1997 PRESIDENT'S BUDGET SUBMISSION
MODIFICATION OF WEAPON SYSTEM

MODIFICATION TITLE: AIM-9M PRODUCT IMPROVEMENT PROGRAM

MODELS OF SYSTEMS AFFECTED: AIM-9M

DESCRIPTION/JUSTIFICATION: The current AIM-9M Sidewinder does not meet the IRCM threat environment. This modification program provides the technology for an upgrade to the AIM-9M inventory. The Guidance and Control section of the AIM-9M missile will be modified at a government depot and/or contractor facility. The AIM-9M-8/9 modification program improves the robustness of CCM without changing any basic AIM-9M characteristics.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in Millions)	FY-95 and prior		FY-96		FY-97		FY-98		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PROCUREMENT										
Installation Kits	2529	14,173	2143	11,898	0	0	0	0	4672	26,071
Installation Kit Nonrecurring		498		0		0		0		498
Engineering Changes		0		100		0		0		100
Gov't In-House Sys Engr/Test		6,526		2,533		0		0		9,059
Training Equipment		1,109		256		0		0		1,365
ILS/Support Equipment		1,616		1,093		0		0		2,709
Installation of Hardware										
FY93 (1009 Kits)		1,530		0		0		0		
FY94 (1520 Kits)		4,570		460		0		0		
FY96 (2143 Kits)		0		150		1,301		1,338		9,349
Total Installation Cost		6,100		610		1,301		1,338		49,151
Total Procurement Cost		30,022		16,490		1,301		1,338		

METHOD OF IMPLEMENTATION: Contractor, Depot, and Weapon Station
CONTRACT DATE: FY 1996: 03/96
PRODUCTION DELIVERY DATE: FY 1996: 03/97
ADMINISTRATION LEADTIME: 6 months
PRODUCTION LEADTIME: 12 months

INSTALLATION SCHEDULE	FY94			FY95			FY96			FY97			FY98		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
INPUT				32	44	298	259	92	327	533	360	466	118	535	536
FY 1993															
FY 1994															
FY 1996															
OUTPUT				32	44	298	259	92	327	533	350	466	118	535	536
FY 1993															
FY 1994															
FY 1996															

The 2143 modified GCS's procured in FY96 will be installed by the contractor (Raytheon Option III for 1200 units and 943 units on the new contract). Quantity/price structure reflects consideration of USAF buys in FY94/95/96 and results in lowest unit price over program duration.

THIS PAGE LEFT INTENTIONALLY BLANK

WEAPONS PROCUREMENT, NAVY				DATE			
BUDGET ITEM JUSTIFICATION SHEET							
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE					
2: Other Missiles (WPN)		HARPOON/SLAM Modification (J2EW (PEO-CU))					
	FY-95	FY96	FY-97	FY-98	FY-99	FY-00	FY-01
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (in Millions)	5.4	2.6	22.9	26.7	50.8	80.9	82.5
MISSION AND DESCRIPTION:							
The HARPOON/SLAM missile modification program provides funds for Engineering Change Proposals (ECP's) and other improvements to its weapons components which are already in the inventory and require retrofit activity. This budget contains the following modification projects which will provide improvements to the guidance, warhead, exercise, sustainer and control sections of the HARPOON/SLAM missile.							
MODIFICATION	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
CAPSULE	1.068	1.865	0.000	0.000	0.000	0.000	0.000
ENCAPSULATED EXERCISE	1.021	0.727	0.088	3.475	3.630	3.756	3.377
SURFACE LAUNCH EXERCISE	1.918	0.000	0.091	0.000	0.000	0.000	0.000
AIR LAUNCH EXERCISE	1.403	0.000	0.041	0.000	0.000	0.000	0.000
SLAM-ER	0.000	0.000	22.673	23.266	47.143	77.129	79.105
TOTALS	5.410	2.592	22.893	26.741	50.773	80.885	82.482

MODIFICATION INSTALLATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	FY95	FY96	FY97	FY98	FY99	FY00	FY01	TOTAL
Harpoon/Slam Mods								
Encapsulated Ex.	0.0	0.0	0.1	0.1	0.0	0.2	0.2	0.6
Surface Launch Ex.	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Air Launch Ex.	0.0	0.0	0.0 *	0.0	0.0	0.0	0.0	0.0 *
Total								
Harpoon/Slam Mods	0.0	0.0	0.2	0.1	0.0	0.2	0.2	0.7

* Amount budgeted is less than \$50 Thousand

Exhibit P-3N Modification Installation Summary

P-1 Shopping List
Item No. 17 Page 2

MODIFICATION OF WEAPON SYSTEM

MODIFICATION TITLE: CAPSULE
 MODELS OF SYSTEMS AFFECTED: UGM-84C/D
 DESCRIPTION/JUSTIFICATION: CAPSULE FOR SUBMARINE LAUNCHED HARPOON-CORROSION CORRECTIVE ACTION CHANGE-REPLACE NON-RFI OR EXPENDED CAPSULE ASSYS
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PRODUCTION
 FINANCIAL PLAN: (\$in Millions)

	FY95 & PY	FY96	FY97	FY98	FY99	FY00	FY01	TC	Total
	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty
RD&E									
PROCUREMENT									
Kit Quantity									
Installation Kits	7	2,339	7	1,865	0	0	0		14
Installation Kit Nonrecurring									4,204
Equipment									
Equipment Nonrecurring									
Engineering Change Orders									
Data									
Training Equipment		0.760							0
Support Equipment									0.760
Other									
Interim Contractor Support									
Installation of Hardware									
(FY95&PY) Eqty (7 kits)	5	0	2	0					7
(FY-96) Eqty (7 kits)					7	0			7
*Total Installation Cost	5	0	2	0	7	0	0	0	14
Total Procurement Cost	3,099	1,865							0
									4,964

METHOD OF IMPLEMENTATION: NWS/YORKTOWN ADMINISTRATION LEADTIME: MONTHS PRODUCTION LEADTIME: 24 MONTHS

CONTRACT DATES: FY96 3/96

DELIVERY DATES: FY96 3/96

	FY95 & PY	FY96	FY97	FY98	FY99	TOTAL
*INSTALLATION SCHEDULE:	1	2	3	4	1	2
INPUT						14
OUTPUT						14

*NOTE: INSTALLATIONS ARE INCIDENTAL TO REGULARLY SCHEDULED MISSILE BUILD-UP AT I-LEVEL.
 THEREFORE NO INSTALLATION FUNDING REQUIRED.

MODIFICATION OF WEAPON SYSTEM

MODIFICATION TITLE: SURFACE LAUNCH HARPOON EXERCISE ROUND CONVERSION KITS
 MODELS OF SYSTEMS AFFECTED: HARPOON MISSILE RGM-84 C/D
 DESCRIPTION/JUSTIFICATION: CONVERT SURFACE LAUNCH TACTICAL MISSILES (LESS SALVO TRAY MODIFICATION) TO FLEET EXERCISE/TELEMETRY MISSILES.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PROCUREMENT/INSTALLATION EXERCISE; NO MILESTONES REQUIRED.
 FINANCIAL PLAN: (\$in Millions)

	FY95 & FY	FY96	FY97	FY98	FY99	FY00	FY01	TC	Total
	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty
RDT&E									
PROCUREMENT									
Kit Quantity									
Installation Kits	37	10,998	0	0	0	0	0	15	52
Installation Kit Nonrecurring									16,345
Equipment									
Equipment Nonrecurring									
Engineering Change Orders									
Data									
Training Equipment									
Support Equipment									
Other									
Interim Contractor Support									
Installation of Hardware									
(FY95 & FY) Egmt (37 Kits)	28	0.675	2	0	7	0.091			37
(FY (TC)) Egmt (15 Kits)								15	0.406
Total Installation Cost	28	0.675	2	0	7	0.091	0	15	0.406
Total Procurement Cost		11.673		0	0	0	0	5.753	17.517

METHOD OF IMPLEMENTATION: NWS/YORKTOWN ADMINISTRATION LEADTIME: MONTHS PRODUCTION LEADTIME: 24 MONTHS

CONTRACT DATES: FY96 N/A

DELIVERY DATES: FY97 N/A

	FY95 & FY	FY96	FY97	FY01	TC	TOTAL
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4		
*INSTALLATION SCHEDULE:						
INPUT	28 2	2 2	2 2	3	15	52
OUTPUT	28 2	2 2	2 2	3	15	52

NOTE: FY95/96 INSTALLS FUNDED WITH FY93 AND PRIOR YEARS DOLLARS.
 FY97 REMAINING INSTALL COST TO BE FUNDED INCIDENT TO
 NORMAL MISSILE MAINTENANCE BUILD-UP AT F-LEVEL.

P-1 Shopping List
 Item No. 17 Page 5

Exhibit P-3a Individual Modifications

096

MODELS OF SYSTEMS AFFECTED: HARPOON MISSILE AGM-84 C/D

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PROCUREMENT/INSTALLATION EXERCISE: NO MILESTONES REQUIRED.

FINANCIAL PLAN: (\$in Millions)

Exhibit P-3a Individual Modifications

OUTPUT

Item No. 17 Page 6

MODIFICATION OF WEAPON SYSTEM

MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

MODELS OF SYSTEMS AFFECTED: AGM-84E

DESCRIPTION/JUSTIFICATION: CONVERTS SLAM TO SLAM ER CONFIGURATION, INCREASING RANGE, ACCURACY, LETHALITY AND ENHANCES INTER-SERVICE COMPATIBILITY

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PRODUCTION

FINANCIAL PLAN: (\$In Millions)

	FY95 & PY	FY96	FY97	FY98	FY99	FY00	FY01	TC	Total
	Qty	\$	Qty	\$	Qty	\$	Qty	Qty	Qty
RD&E									
PROCUREMENT									
Kit Quantity									
Installation Kits (1)(2)(3)			23	17,176	23	16,888	85	39,206	188
Installation Kit Nonrecurring									69,629
Equipment				0.607		0.482		1,315	
Equipment Nonrecurring									
Engineering Change Orders				0.167		0.166		0.550	1,075
Data				1.165		0.289		0.478	
Training Equipment (Ex. Sect.)			5	0.839	4	0.678	4	0.687	5
Support Equipment (Containers)			23	0.290	23	0.269	85	0.861	180
Other (Field Support)				2.429		4.292		3.839	
Interim Contractor Support						0.202		0.207	
Installation of Hardware (2)									
(FY97) Equip (23 kits)									
(FY98) Equip (23 kits)									
(FY99) Equip (85 kits)									
(FY00) Equip (180 kits)									
(FY01) Equip (188 kits)									
(FY (TC) Equip (201 kits)									
Total Installation Cost									
Total Procurement Cost				22,873		23,266	47,143	77,129	79,105
									145,005
									394,321

12 MONTHS

PRODUCTION LEADTIME:

MONTHS

ADMINISTRATION LEADTIME:

DEPOT COMMERCIAL

CONTRACT DATES: FY97 3/97 FY98 3/98

DELIVERY DATES: FY98 3/98 FY99 3/99

INSTALLATION SCHEDULE:

FY97

1 2 3 4

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

23

(1) KIT CONSISTS OF GFE SLAM AIR AND CFE COMPONENTS.

(2) INSTALLATION COSTS ARE INCLUDED IN THE INSTALLATION KITS LINE SINCE KIT COST AND INSTALLATION COST ARE NON-SEVERABLE

(3) ESTIMATED COSTS FOR INSTALLATION KITS / INSTALLATION OF HARDWARE IS EFFECTED BY CONCURRENT FMS PRODUCTION (Harpoon and/or SLAM)

FMS ASSUMPTIONS INCLUDE 50 UNITS IN FY97, AND 100 UNITS IN FY98-FY03.

(4) INPUT SCHEDULE REFLECTS DELIVERY OF FLEET BASELINE SLAM MISSILES TO CONTRACTOR SITE FOR MODIFICATION.

Exhibit P-3a Individual Modifications

P-1 Shopping List

Item No. 17 Page 7

097

THIS PAGE LEFT INTENTIONALLY BLANK

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										MAY	1995
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE									
WEAPONS PROCUREMENT, NAVY		STANDARD MISSILES MODIFICATION (12FK)									
BA-2 OTHER MISSILES		FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01			
QUANTITY											
COST (in millions)		\$32.4	\$29.9	\$18.5	\$25.3	\$33.0	\$33.8	\$34.5			
<p>PROGRAM OVERVIEW: The STANDARD Missile Modification Program provides for improvements in operational readiness and electronic counter measures (ECM) performance in the STANDARD Missiles currently deployed. All of these modifications are "turn-key" and do not involve separate install funding. The following modification projects included in this budget are:</p>											
SM-1		9,877	7,297	7,427	7,397	7,276	7,364	7,437	129,588		
Missile Homing Improvement Program	(WP,N) (RDT&E)*	22,698 18,734	22,609 8,000	11,113	17,893	25,762	26,414	27,078	91,627		
*NON ADD											

EXHIBIT P-40

PAGE NO. 1

P-1 Shopping List
ITEM NO. 18

Form 2454, JUN 86

UNCLASSIFIED

099

UNCLASSIFIED
INDIVIDUAL MODIFICATION
P-3A

MAR 1996

100

Modification Title:

Low Altitude Improvement

Models of Systems Affected:

STANDARD Missile RIM-66E (SM-1 BLOCK VI)

Description/Justification:

The STANDARD Missile Low Altitude Improvement consists of improvements which were approved by SECNAV in PMP 85-02 on 22 May 1986. In SM-1, the modifications are only to the missile with no interface change with the ship. Therefore, the common nomenclature is a letter change to the block number. Specifically, SM-1 Block VIB. Backfit of the initial changes into SM-1 Block VI is by replacement of the electronics assembly in the fuze by an ORDAULT to the guidance section.

Development Status/Major Development Milestones:

A Block VIB missile configured with a MK 45 Mod 7 fuze incorporating a low altitude (blind-in-clear) Mod and Telemeter ANDKT-27D engineering development unit, retrofit unique for fuze function data collection, was successfully flight tested April 1995 during USS Eirod CSSQT.

Financial Plan:

	FY95 & Prior	FY96	FY 97	FY 98	FY 99	FY 00	FY 01	TO COMP	TO TOTAL
KIT Quantity	287	52	52	52	52	52	52	749	1,348
Installation Kits	37,548	6,687	6,897	6,867	6,746	6,834	6,907	126,918	205,404
Installed Equipment Nonrecurring	0	0	0	0	0	0	0	0	0
Engineering Change Orders	50	40	30	30	30	30	30	90	330
Data	530	10	0	0	0	0	0	60	600
Training Equipment	1,375	60	0	0	0	0	0	0	1,435
Support Equipment	400	0	0	0	0	0	0	0	400
Total Procurement Cost	39,903	6,797	6,927	6,897	6,776	6,864	6,937	127,068	208,169
Installation Cost	582	0	0	0	0	0	0	0	582
Other	7,504	500	500	500	500	500	500	2,500	13,004
Total Cost	47,407	7,297	7,427	7,397	7,276	7,364	7,437	129,568	221,173

Method of Implementation: Fuzes and guidance sections will be refurbished at the depots and will be modified into Block VIB configuration on the production line at a rate which will provided a constant workload. The modified sections will then be returned to the AUR Facility for integration into the round.

18-2

UNCLASSIFIED

UNCLASSIFIED

P-3A

Low Altitude Improvement (Continued)

(U) Contract Data:

Current Year: 03/96

Budget Year: 02/97

(U) Production Delivery Data:

Current Year: 06/97

Budget Year: 05/98

(U) Installation Schedule:

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	TOTAL
INPUT							
FY 95	11	20	20	14	14	14	65
FY 96							52
FY 97							52

(U) Installation Schedule:

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	TOTAL
OUTPUT							
FY 95	9	18	20	18	14	14	65
FY 96							52
FY 97							52

18-3

UNCLASSIFIED

UNCLASSIFIED

102

INDIVIDUAL MODIFICATION
P-3A

MAR

1995

Modification Title: Missile Homing Improvement Program (MHIP)
Models of Systems Affected: STANDARD Missile (MR) RIM-66G/HDescription/Justification:

The Standard Missile-2 is an integral element of the AEGIS weapon system and provides area defense against air threats. The SM-2 Block IIIB MHIP provides homing improvements to the SM-2 BLK II/III missiles for operations in a hostile ECM environment. In addition to the IR Seeker Kit, the SM-2 BLK IIIB Modification Kit includes the MK45 Mod 9 Target Detecting Device (TDD), the MK125 Warhead, the MK54 Safe and Arm (S&A) device and an updated Digital Signal Processor (DSP).

Development Status/Major Development Milestones:

The SM-2 Block IIIB successfully completed DT TECHEVAL at White Sands Missile Range (WSMR) and was approved for Low Rate Initial Production (LRIP) via modification program by a paper NPDM; the ADM was signed on 20 Nov 96. The SM-2 Block IIIB capability to defeat the designated threat was successfully demonstrated during the DT TECHEVAL at sea in December 1996. With the exception of the IR Seeker kit and the updated DSP, all other components of the modification kit are in active SM production.

Financial Plan:

	FY95 & Prior	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	TO COMP	TOTAL
RD&E: N/A									
WPN: (\$K)	294,571	8,000							
KIT Quantity	85	85	62	84	120	120	120	434	1,100
Installation Kits	22,698	22,609	11,113	17,893	25,752	26,414	27,078	91,627	245,184
Installation Kit Nonrecurring	0	0	0	0	0	0	0	0	0
Installed Equipment	0	0	0	0	0	0	0	0	0
Installed Equipment Nonrecurring	0	0	0	0	0	0	0	0	0
Engineering Change Orders	0	0	0	0	0	0	0	0	0
Data	0	0	0	0	0	0	0	0	0
Training Equipment	0	0	0	0	0	0	0	0	0
Support Equipment	7704	0	0	0	0	0	0	0	0
Total Procurement Cost	22,698	22,609	11,113	17,893	25,752	26,414	27,078	91,627	245,184
Installation Cost	0	0	0	0	0	0	0	0	0
Total Cost	22,698	22,609	11,113	17,893	25,752	26,414	27,078	91,627	245,184

18-4

UNCLASSIFIED

UNCLASSIFIED

Missile Homing Improvement Program (MHIP) (Continued)

Method of Implementation: Guidance sections will be reworked at the depots and modified into SM-2 Block IIB configuration at a rate which will provide a constant workload. The modified sections will then be sent to the contractor All-Up-Round (AUR) facility for integration into the round.

Contract Date:	Prior Year	Current Year	Budget Year
SEEKER	3/96	3/96	1/97
Target Detecting Device (TDD)	7/95	6/96	6/97
GC&A (Digital Signal Processor)	3/96	3/96	1/97
MK125 Warhead	4/95	4/96	4/97
MK54 Safe and Arm	8/95	3/96	3/97
Production Delivery Date:	Prior Year	Current Year	Budget Year
SEEKER	5/97	1/98	1/99
Target Detecting Device (TDD)	10/96	10/97	10/98
GC&A (Digital Signal Processor)	05/97	1/98	1/99
MK125 Warhead	10/96	10/97	10/98
MK54 Safe and Arm	10/96	10/97	10/98

Installation Schedule:

	FY 97				FY 98				FY 99				FY 00				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT																	
FY 95																	85
FY 96																	85
FY 97																	52
OUTPUT																	
FY 95																	85
FY 96																	85
FY 97																	52

18-5

UNCLASSIFIED

THIS PAGE LEFT INTENTIONALLY BLANK

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										DATE					
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE:					BLI:					
Weapons Procurement, Navy BA-2: Other Missiles					Weapons Industrial Facilities										
QUANTITY		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001	
COST (In Millions)		\$ 51.2		\$ 41.8		\$ 34.3		\$ 10.5		\$ 11.0		\$ 11.2		\$ 11.4	

This line item funds capital rehabilitation projects at eight government-owned contractor operated plants for weapons such as Sparrow, HARM, Sidewinder, Standard, Phoenix, gun mounts, Phalanx, and rocket motors. The facilities management contracts require that the government fund capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will limit capabilities to maintain scheduled production rates and overall productivity. The following estimates are for capital type rehabilitation areas. Funding is separated to reflect environmental, safety, major repair, energy conservation, and facilities restoration:

ENVIRONMENTAL:

Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations. These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and/or severe financial penalties are to be avoided.

SAFETY:

Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations. These regulations mandate requirements which must be met if plant shutdowns and/or severe financial penalties are to be avoided.

MAJOR REPAIR:

Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.

ENERGY CONSERVATION:

Provides funds to decrease energy consumption by installing new energy efficient systems and also provides funds for increased maintenance of these systems.

FACILITIES RESTORATION:

Provides funds for replacement of Weapons Industrial Facilities that have exceeded their useful life and have deteriorated beyond safe operations. Facilities restoration funding in this submission are associated with projects at the Allegany Ballistics Laboratory (ABL) located in West Virginia.

DD FORM 249, JUL 88

P-1 SHOPPING LIST
ITEM NO. 19 PAGE NO. 1

EXHIBIT P-40

UNCLASSIFIED

UNCLASSIFIED
CLASSIFICATION

PROGRAM COST BREAKDOWN				DATE				
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
WPN/B.A. 2 - Other Missiles		WEAPONS INDUSTRIAL FACILITIES						
COST CODE	ELEMENT OF COST	IDENT CODE	FY1995		FY1996		FY1997	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
FU002	Capital Type Rehabilitation	A						
	Environmental (SEA) (AIR)			6,322 (1,700) (4,622)		3,703 (1,000) (2,703)		1,357 (300) (1,057)
	Safety (SEA) (AIR)			3,950 (2,652) (1,298)		1,763 (450) (1,313)		957 (400) (557)
	Major Repairs (SEA) (AIR)			10,219 (383) (9,836)		4,042 (800) (3,242)		1,381 (250) (1,131)
	Energy Conservation (SEA)			2,200 (2,200)		2,315 (2,315)		565 (565)
FU005	Facilities Restoration (ABL) (SEA)	A		28,500 (28,500)		30,000 (30,000)		30,000 (30,000)
	TOTAL Weapons Industrial Facilities (SEA) (AIR)			51,191 35,435 15,756		41,823 34,565 7,258		34,260 31,515 2,745

EXHIBIT P-5

P-1 SHOPPING LIST
ITEM NO 19 PAGE NO 2

UNCLASSIFIED
CLASSIFICATION

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET						DATE	Mar-96
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE					
WEAPONS PROCUREMENT, NAVY/BA-2 - Other Missiles		FLEET SATELLITE COMMUNICATIONS (A) Q2EU					
	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
QUANTITY							
COST (in millions)	\$131.3	\$87.4	\$113.2				
<p>The Fleet Satellite Communications (FLTSATCOM) System satisfies Department of Defense (DOD) worldwide Ultra High Frequency (UHF) mobile user communication requirements. This includes protected fleet broadcast to all Navy ships plus command control for Anti-Submarine Warfare platforms, Fleet Ballistic Missile submarines, aircraft carriers, cruisers and other selected aircraft, ships and submarines. The system satisfies the Air Force equatorial satellite communications requirements including Presidential airborne command post, Strategic Air Command and emergency mission support. Existing Fleet Satellite (FLTSAT) and Lease Satellite (LEASAT) assets will continue to be used as long as their performance is operationally acceptable. UHF Follow-On (UHF/FO) satellites are being deployed to replace the aging FLTSAT/LEASAT constellation.</p> <p>FY 1995 resources funded launch service payments for satellites #4 through #9, finished ground systems installations, and provided technical support for satellite production. FY 1995 also included funding for enhanced Extremely High Frequency (EHF) space packages on satellites F7 through F9. FY 1996 and FY 1997 funds will complete launch service payments for satellites #7 through #9 and provide technical support for satellite production. FY 96 and FY 97 funds the Global Broadcast Services (GBS) on F8, F9, and F10.</p> <p>The fourth UHF/FO spacecraft, F4, was successfully launched in January 1995. The fifth UHF/FO spacecraft, F5, was successfully launched in May 1995.</p> <p>The sixth satellite was successfully launched in October 1995.</p> <p>MODIFICATION SUMMARY</p> <p>EQUIPMENT FY95</p> <p>UHF/FO 0.2</p>							

Exhibit P-40

P-1 SHOPPING LIST

ITEM NO. 20

PAGE NO. 1

UNCLASSIFIED
CLASSIFICATION

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS										
DATE: Mar-96										
PROGRAM: FLEET SATELLITE COMMUNICATIONS Q2EU										
TOTAL COST IN THOUSANDS OF DOLLARS										
COST CODE	ELEMENT OF COST	IDENT CODE (2)	FY 95			FY 96			FY 97	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
02000	UHF FOLLOW-ON SPACECRAFT AND LAUNCH GLOBAL BROADCAST SERVICES ENGINEERING SUPPORT	N/A		127,775		26,467		22,272		
		N/A		3,294		57,721		86,737		
						3,195		4,233		
	SUBTOTAL			131,069		87,383		113,242		
00776	INSTALL SHORE	N/A		207						
	TOTAL PROGRAM			131,276		87,383		113,242		

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

ITEM NO.

20

PAGE NO.:

2

Exhibit P-5

UNCLASSIFIED

CLASSIFICATION

Mar-96

MODIFICATION INSTALLATION SUMMARY
(TOA, Dollars in Millions)

System/Modification	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	TOTAL
<u>UHF Follow-On</u>							
UHF Follow-On (SHORE)	0.8	0.2					1.0
Total for UHF Follow-On (SHORE)	0.8	0.2	0.0	0.0	0.0	0.0	1.0

Exhibit P-3N Modification Installation Summary

MODIFICATION TITLE: FLEET SATELLITE COMMUNICATIONS

MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

The Fleet Satellite Communications (FLTSATCOM) System satisfies DOD worldwide Ultra High Frequency (UHF) mobile user communications requirements. This includes protected fleet broadcast to all Navy ships plus command control for Anti-Submarine Warfare platforms, Fleet Ballistic Missile submarines, aircraft carriers, cruisers and other selected aircraft, ships and submarines. The system satisfies the Air Force equatorial satellite communications requirements including Presidential airborne command post, Strategic Air Command and emergency mission support. Install funding is for the installation of ground support equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fully developed off the shelf procurement.
FINANCIAL PLAN: (\$ in millions)

RDT&E
PROCUREMENT
Kit Quantity
Installation Kits
Installation Kit Nonrecurring
Equipment
Equipment Nonrecurring
Engineering Change Orders
Data
Training Equipment
Support Equipment
Other
Interim Contractor Support
Installation of Hardware
(PY) Equip
FY95 Equip
FY96 Equip
FY97 Equip
FY98 Equip
FY99 Equip
FY00 Equip
FY01 Equip
FY TC Equip
Total Installation Cost
Total Procurement Cost

METHOD OF IMPLEMENTATION:

CONTRACT DATES:

DELIVERY DATE:

INSTALLATION SCHEDULE:

INPUT

OUTPUT

INSTALLATION SCHEDULE:

INPUT

OUTPUT

P Y	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	T C	Total
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
5	11.5								5 11.5
5	3.7	0.2							5 3.9
5	3.7	0.2							5 3.90
	15.2	0.2							15.40

N/A ADMINISTRATIVE LEADTIME: N/A N/A

FY 1995: N/A FY 1996: N/A FY 1997: N/A

FY 1995: N/A FY 1996: N/A FY 1997: N/A

PY 1 2 3 4 1 2 3 4 1 2 3 4

5 N/A N/A N/A N/A

5 N/A N/A N/A N/A

1 2 3 4 1 2 3 4 1 2 3 4

TC

5 5

5 5

P-1 SHOPPING LIST
ITEM NO. 20
PAGE NO. 3

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES

B. APPROPRIATION/BUDGET ACTIVITY		C. P-1 ITEM NOMENCLATURE		FLEET SATELLITE COMMUNICATIONS (A)		Q2EU		A. DATE	
WEAPONS PROCUREMENT, NAVY/BA-2 - Other Missiles		QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS		PLANNED BUDGET YEAR (FY96) PROCUREMENT		PLANNED BUDGET YEAR (FY97) PROCUREMENT		BALANCE	
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY96) PROCUREMENT	PLANNED BUDGET YEAR (FY97) PROCUREMENT	BALANCE	PHASING RATIONALE	
2000	UHF FOLLOW-ON S/C	9	5	4					
3000	LEASAT SPACECRAFT	3	3						
MEMO ENTERED									
ITEM #1	2000	UHF FOLLOW-ON S/C							
<p>THE UHF FOLLOW-ON (UHF/FO) SPACECRAFT CONSTELLATION WILL CONSIST OF EIGHT ON-ORBIT SATELLITES PLUS ONE ON-ORBIT SPARE. THE FIRST UFO SPACECRAFT, F1, WAS LAUNCHED IN MARCH 1993, BUT WAS DECLARED A TOTAL LOSS DUE TO THE INABILITY TO REACH OPERATIONAL ORBIT BECAUSE OF LESS THAN EXPECTED PERFORMANCE OF THE LAUNCH VEHICLE. THE SECOND SPACECRAFT WAS SUCCESSFULLY LAUNCHED IN SEPTEMBER 1993. THE THIRD SPACECRAFT WAS SUCCESSFULLY LAUNCHED IN JUNE 1994. THE FOURTH SPACECRAFT WAS SUCCESSFULLY LAUNCHED IN JANUARY 1995. THE FIFTH SPACECRAFT WAS SUCCESSFULLY LAUNCHED IN MAY 1995. IN THE FY94 APPROPRIATION ACT, CONGRESS APPROVED FUNDING A REPLACEMENT FOR F1 WITH CONTRACT REMEDIES FUNDS AND CREDITS FROM THE F1 LOSS. THE SIXTH SATELLITE WAS SUCCESSFULLY LAUNCHED IN OCTOBER 1995.</p>									
ITEM #2	3000	LEASAT SPACECRAFT							
TOTAL I/O		TOTAL I/O		TOTAL I/O		TOTAL I/O		TOTAL I/O	
9		9		3		3		TOTAL I/O	
ITEM #3		ITEM #4							

DD FORM 2447-1, JUN 86

P-1 SHOPPING LIST

ITEM NO. 20
PAGE NO. 4

Exhibit P-23B

UNCLASSIFIED
CLASSIFICATION

THIS PAGE LEFT INTENTIONALLY BLANK

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET						DATE
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE:				BLI: 250000
Weapons Procurement, Navy BA-2: Other Missiles		Ordnance Support Equipment				
QUANTITY	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000
COST (In Millions)	\$11.6	\$9.7	\$19.1	\$9.9	\$10.3	\$9.7
						\$11.2

No justification materials are submitted in this backup book due to security considerations.

DD FORM 14-4, JUL 88

P-1 SHOPPING LIST
ITEM NO. 21 PAGE NO. 1

EXHIBIT P-40

UNCLASSIFIED

THIS PAGE LEFT INTENTIONALLY BLANK